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**Legitimate Influence -
the Key to Advanced Nursing Practice
in Adult Critical Care**

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Thesis submitted in fulfilment of requirements for the degree Doctor of Philosophy

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Date of Submission July 2000

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Acknowledgements

In the first instance I would like to extend my thanks to all participants who contributed to the study. In particular the key participants who continued to provide critical feedback, challenge and direction throughout the entire course of the study.

I would also like to express my gratitude to all those who provided critical reviews of the thesis through its various phases of development. In this regard especial thanks go to Professor Carol Cox and Philippa Sully.

Professor Cox has acted as an advisor to this thesis and as such has supported data collection abroad particularly in the United States of America, Australia and New Zealand. She has also provided astute evaluation of the developing thesis, challenged assumptions and questioned the construction of the developing theory. In particular, she has provided constructive feedback and returned draft chapters at the agreed time. This latter attribute has led, in no small part, to the completion of the thesis within the time scale allowed by the University.

Philippa Sully has acted as my co-analyst. In the early days she aided my understanding of grounded theory methods, particularly the processes associated with constant comparative analysis. Latterly, she has challenged the construction of the substantive theory presented in this thesis and demonstrated remarkable insight into the raw data.

I also wish to thank Professor Bob Heyman for his extremely useful comments on the final draft of the thesis.

I am also deeply grateful to all those who used their influence in helping me make contact with the study's participants.

Finally, but perhaps most importantly, I would like to thank my parents for their unfailing support throughout all my endeavours.

Declaration

I declare this work to be my own.

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Carol Ball

Abstract

At the inception of this research study the intent was to inform the debate regarding advanced nursing practice in adult critical care, in the United Kingdom. Argument within the nursing profession was vociferous concerning the nature of advanced nursing practice and to achieve some insight into the conundrum the following research question was posed, 'What is 'advanced' about advanced nursing practice in adult critical care?' To pursue the research question in greater depth three aims were stated. These reflected a desire to explore the development and activity of advanced practice nurses in adult critical care; to gain a perspective of the processes involved in their socialisation and to develop a model which would reflect these elements. The research utilised grounded theory methods, within the constructivist paradigm. The purpose of this was to reflect a relativist ontology in which reality was the subject of joint interpretation and a subjectivist epistemology where the researcher and participant co-created an understanding of the phenomenon of advanced nursing practice in adult critical care, within a naturalistic context. The methodological procedures led to the construction of the substantive theory, Legitimate Influence: the key to advanced nursing practice in adult critical care. This represents a unique contribution to the extant body of nursing knowledge associated with advanced nursing practice. The central elements comprised a focus on enhanced patient stay and improved patient outcome, the development and maintenance of credibility, underpinned by an ability to engage in advanced clinical nursing practice and the development and dissemination of knowledge. The ubiquitous nature of power between, and within, professional groups was also evident in the constraints placed upon the exercise of Legitimate Influence. Participants were also able to articulate the difference between expert and advanced clinical nursing practice; critical care practice within the domain of medicine and nursing and the focus of future patient orientated nursing research. Emphasis was also placed on the importance restorative care, and the need to balance this with the exigencies of cure. The study concludes with recommendations for practice, research and policy.

CHAPTER 1

Introduction

The purpose of this chapter is to establish the key issues which signified the need for the research study and determined the primary research question. The research aims are stated in order to indicate the direction of the study. To promote clarity, the context within which the study took place, is defined and the scope of the research identified. In conclusion the structure of the thesis, portraying the research study, will be delineated.

1:1 Background and Rationale for the Study

An investigation into the nature of advanced nursing practice in adult critical care was undertaken as a response to the significant forces impacting upon the profession of nursing, over the past decade, in the United Kingdom (UK). The initial drivers for change in the delivery of health care generally, and nursing in particular, were the National Health Service (NHS) and Community Care Act (1990) and the new deal on junior doctors hours (NHSE 1991). The NHS and Community Care Act (1990) introduced a division between the purchase and supply of health services. Hospitals became 'Trusts' and providers of health services which required in-patient treatment. General practitioners and health authorities became the purchasers of health services. Thus the concept of the internal market was introduced. Efficiency measures were paramount within the internal market and this required a strong management focus. Senior nurses, within the Trusts, responded by undertaking management diplomas and Masters in Business Administration (MBA). The focus moved away from nursing practice towards management of the service. This was particularly evident as clinical grading, established in the late 1980's to provide a clinical career ladder and reward nurses remaining in practice, was eroded (News Focus, 1996). Nursing became management driven, rather than practice led (Ball, 1997). The two roles are distinct and have been clearly delineated by Obholzer and Roberts (1994):

"Management refers to a form of conduct by those in authority that is intended to keep the organisation functioning ... Leadership implies looking to the future, pursuing an ideal or goal"

(Obholzer and Roberts, 1994:43)

Government policy also began to determine the centrality of the patient within the NHS which had developed, from its inception in 1948, to a system which appeared to meet the needs of hospital staff and the professions, rather than those of the patient (Gerson, 1976). Examples of this professional versus patient centred focus were; long waiting lists (Pope, 1992), unacceptable waiting times in out patients departments and the unknown outcomes of individual hospitals in terms of patient morbidity and mortality. This was particularly evident in the area of adult critical care (Health Care Needs Assessment 2000, Audit Commission 1999). The UK Government continues to grapple with these issues to the current day, as evidenced by the institution of the National Institute for Clinical Excellence (NICE), the Commission for Health Improvement (CHI) (Health Care Act 1999) and the investigation of adult critical care services by the Audit Commission (Audit Commission 1999). The aim of these initiatives is to deliver a 'New NHS' (The New NHS - modern, dependable, 1997) which establishes a sound evidence base for practice and emphasises the welfare of the patient. To achieve this it is clear that nursing in the UK, as a profession, is seen as vital to the delivery of the new NHS and that expansion and extension of the nurse's role in both the acute and community sectors is expected (Making a Difference 1999; A First Class Service 1998; Fit for the Future 1998; Putting Patients First 1998; Towards a New Way of Working 1998; The New NHS - modern, dependable 1997).

At the same time the reduction in junior doctors hours and the reform of medical education provided both an opportunity for nursing in the UK, and a dilemma. The opportunity lay in expanding skills and scope of practice with the aim of expediting and improving patient care (Hopkins, 1996; Pickersgill, 1993). The dilemma lay in the perception that tasks, which were tedious to medical staff, would be thrust into the domain of nursing by default (Dowling, 1996a; Dowling, 1996b; Gee, 1995). This conundrum succeeded in polarising the debate. Advanced nursing practice was seen by some to be the advancement of nursing practice, exemplified by clinical nurse specialists (Curley, 1998) or nurse consultants (Manley, 1997; Elcock, 1996). Alternatively it was seen, by others, as the acquisition of new skills previously within

the domain of medicine, reflected by the nurse practitioner movement (Roberts-Davis et al, 1998; Torn and McNichol, 1998; Hodgkiss-Lagan, 1996).

Both perspectives were often interpreted as exemplars of advanced nursing practice and perplexity was apparent within the profession (Ball 1997). In particular, there was continued concern about the 'fit', of the various roles identified above, into current perceptions of 'acceptable' nursing practice and at what level different nurses might be deemed to be working (UKCC, 1998a; UKCC, 1998b; McGee et al, 1996; UKCC, 1994). It could be argued that robust leadership from a practice, rather than management, base might have prevented the protracted controversy which permeated the decade in the UK (Torn and McNichol, 1998; UKCC, 1997b; Manley, 1996). It appeared nursing, in the UK, had lost its way (Albarran and Fulbrook, 1998; Short et al, 1995).

Two major factors contributed to this situation; the erosion and devaluing of nursing practice and a lack of practice based leadership (Ball, 1997). The introduction of advanced nursing practice might offer the opportunity to forestall further erosion, establish practice based leadership and enable a practice orientated response to the formation and delivery of the New NHS. However, this might only be possible if the concept could be clarified and its impact on patient welfare and outcome demonstrated. Therefore, the study represented in this thesis, was undertaken to explore the nature of advanced nursing practice from the perspective of nurses in a variety of advanced practice roles.

The study aimed to answer the following question:

What is 'advanced' about advanced nursing practice in adult critical care?

The main aims of the research were to:

1. explore the development and activity of nurses who were employed in an advanced practice role in adult critical care.
2. gain a perspective of the socialisation of those engaged in advanced nursing practice in adult critical care.
3. develop a model of advanced nursing practice for adult critical care which would enable patients, families, practitioners, managers and educators to clearly delineate the role.

1:2 The Context of the Study

To provide a practice focus for the study the context of adult critical care was chosen. 'Adult' refers to a patient population over the age of sixteen and therefore precludes paediatric and neonatal populations. The exploration of advanced nursing practice throughout the entire nursing profession was beyond the scope of this thesis. There were also two further reasons. Firstly, the utility of adult critical care services were the subject of scrutiny within the UK during the conduct of the research study presented in this thesis. This was evident in several publications (Health Care Needs Assessment, 2000; National Health Service Executive, 2000; Audit Commission, 1999). Concerns were also raised in relation to morbidity and mortality and the care and management of patients pre and post discharge from the Intensive Care Unit (Goldhill and Sumner, 1998; McQuillan et al, 1998; Wallis et al, 1997). Secondly, it was also evident that the acquisition of certain skills were often used to denote an advanced level of nursing practice (Dillon and George, 1997). Confusion may have arisen in the interpretation of data if the skills used within the context of the study were unknown. For example, the manipulation of vasoactive drugs is deemed to be everyday nursing practice in Intensive Care, but might be seen as portraying an 'advanced' level of function from a ward perspective. To avoid errors of this nature in interpreting data the area of nursing practice had to be known to the researcher, although this was somewhat unusual when qualitative research methods were to be utilised. A robust approach to ensuring the credibility of the study would need to be evident to avoid potential bias.

At the beginning of the study, in 1996, adult critical care was defined as:

"a service for patients with potentially recoverable conditions who can benefit from more detailed observation and invasive treatment than can safely be provided in general wards or high dependency".

(Department of Health, 1996:6):

In the first instance this was interpreted as the Intensive Care Unit only. However, as the study progressed and the nature of advanced nursing practice was revealed it became apparent that adult critical care equated with a wide range of patient need. Therefore, data was collected from areas where critically ill, or potentially critically ill, patients were found. This included Emergency Departments, Cardiac and Transplantation Units, Cardiology and Neurosciences as well as General Intensive Care Units.

It was also necessary to define what 'customary' nursing practice in adult critical care was, if an advanced level of practice were to be determined (Ball, 1999). For the purpose of this study 'customary' care of the critically ill comprises the continuous monitoring and observation of patients for alterations in physiologic status. This involves planning care and intervening in a variety of forms to maintain homeostasis. Evaluation of patient response is also a crucial factor in determining progress or deterioration (McKinley, 1999). The process of care usually has a short term focus, sometimes of only a few hours, depending on the instability of the patient and the degree of resuscitation which has to be achieved. Nurses are usually 'unit-based' i.e. remain in a designated part of the hospital labelled as an Intensive or High Dependency Unit. Adult critical care nurses in the UK are usually educationally prepared to diploma or degree level within their specialist field, although this is by no means true of all nurses working in adult critical care (Audit Commission, 1999). The education undertaken by nurses, in the UK, is also not standardised (Scholes et al, 1999). However, in general terms, a nurse who has been educationally prepared to work in the speciality, and has gained several years of experience, may be assumed to have an appropriate knowledge base in adult critical care, high level decision making skills and sensitivity to the needs of the critically ill and those close to them.

1:3 The Scope of the Study

The research study was undertaken over a period of four years (1996 - 2000). A major problem confronted the proposed research at its inception. In short, there were very few nurses working in adult critical care, in the UK, who might be deemed to be functioning at an advanced level and fulfilled the selection criteria for the study (Section 4:4). The reasons for this situation have been outlined earlier. To answer the research question it was necessary to take an international perspective where advanced practice roles in adult critical care nursing were more in evidence. In particular, these included the United States of America (USA) and Canada where Clinical Nurse Specialists (CNS) and Nurse Practitioners (NP) were in post; and in Australia and New Zealand where the advanced practice role was designated Clinical Nurse Consultant (CNC). Therefore, data collection was undertaken predominantly in these countries to ascertain if a model of advanced nursing practice in adult critical care could be developed which would meet the exigencies of the research question and inform debate within the UK.

Throughout the study the terms 'patient' and 'family' have been used to promote clarity within the text. It is recognised that these terms may connote a value judgement inferring a paternalistic stance. This is not the intention of the thesis. 'Patient' refers to a person who is about to experience, is experiencing or is recovering from critical illness. 'Family' refers to people who are deemed to be close to the patient, particularly if the patient has been able to make his or her wishes known.

1:4 The Structure of the Thesis

A preliminary review of the literature was undertaken to determine the status of advanced nursing practice in terms of role, function and education. Research and theoretical extrapolations, associated with the utility of advanced nursing practice, were also evaluated to establish the status of knowledge associated with the research topic. These issues form the substance of the following chapter.

It was identified that grounded theory, underpinned by symbolic interactionism and interpretive interactionism, (Strauss and Corbin, 1998; Strauss, and Corbin, 1997;

Strauss and Corbin, 1990; Lincoln and Guba, 1985; Glaser, 1978; Glaser and Strauss, 1967) was a suitable methodology with which to explore the research question. It also provided a means through which the main aims of the study could be met. Namely, exploring the development and activity of nurses engaged in advanced nursing practice; gaining a perspective of the social processes which pertain to those engaged in advanced nursing practice and developing a model of advanced nursing practice in adult critical care. The basic tenets of grounded theory were adhered to i.e. theoretical sensitivity (Glaser, 1978; 1998), theoretical sampling, theoretical saturation and constant comparative analysis (Strauss and Corbin, 1990). These processes are described in Chapter 4.

However, in making the choice to use grounded theory methodology it became apparent that an animated debate was evident within the literature associated with the ontological, epistemological and theoretical basis of the methodology (Annells, 1996, 1997a, 1997b). This is portrayed in Chapter 3, where the paradigmatic perspective and theoretical foundation of the current research study are made evident.

The results of the research process are portrayed in Chapter 5, where a staged approach to the development of the paradigm model and core category is depicted. The chapter commences with the portrayal of the paradigm model (Figure 5:1) and its derivation from the conditions associated with axial coding. The chapter concludes with the presentation of the core category, which was obtained through the process of selective coding. Both the paradigm model and core category represent substantive theory development, at an explanatory level.

The thesis concludes by outlining the results of the research study, presented in this thesis, which represent a significant contribution to the current knowledge base associated with advanced nursing practice. Relevant issues, already apparent within the literature, are integrated with the results of the study (Chapters 1, 2 and 5). The limitations of the research are also acknowledged. The effects of these on the future development of the theory, generated from this research, are then discussed. Recommendations for practice, research and policy are made. The thesis finally concludes by summarising the contribution of the study to the future development of advanced nursing practice, within the field of adult critical care, in England.

CHAPTER 2

A Preliminary Review of the Literature

At the beginning of the study a preliminary review of current literature (Ball, 1997) and personal reflection upon the status of advanced nursing practice were undertaken to enhance theoretical sensitivity (Section 4:1). Research and theoretical extrapolations, associated with the utility of advanced nursing practice, were also critically analysed to determine the current status of knowledge associated with the research question and aims. This process demonstrated a series of anomalies and these form the structure of Chapter 2.

2:1 Role Titles, Practice Orientation and Educational Preparation in Advanced Nursing Practice

In the main, anomalies related to the plethora of titles associated with expansion of the nurses role beyond that of initial registration. The practice orientation nurses engaged in advanced practice roles and the level of education required to prepare nurses for an advanced level of nursing practice were also the subject of considerable debate.

Analysis of the many titles used to label advanced practice roles in nursing (Keane and Richmond, 1993; Naylor and Broton, 1993; Bullough, 1992) revealed four common descriptors:

- specialist
- advanced
- clinical
- practitioner

The first was associated with the title clinical nurse specialist. It inferred the nurse was a specialist, working in a specialist area such as Breast Care or Asthma who had specialist knowledge of certain disease processes (Naylor and Broton, 1993).

It was also associated with a nurse working in a specialist area, such as adult critical care, who had established competency and was able to manage complex patients following appropriate education and experience. In Australia the label clinical nurse specialist (CNS) was associated with the latter example, whilst the term clinical nurse consultant represented an advanced level of nursing practice. In the USA and Canada, however, the title CNS was an advanced practice title and reflected both the attainment of specialist knowledge and the development of nursing practice (Gawlinski and Kern, 1994).

In the UK, the UKCC (1994) coined the term 'specialist practitioner' and associated 'specialist' with a level, rather than an area of practice. Specialist practitioners were those who:

"exercise higher levels of judgement, discretion and decision making in clinical care."

(UKCC, 1994:9)

This caused some confusion in the UK, especially in the field of adult critical care, where nurses were ready to think of themselves as specialist nurses due to their competence and experience in a particular speciality. The UKCC however was adamant that 'specialist' related to a level of nursing practice, not a particular speciality area (UKCC, 1998a). In 1994 specialist practitioners were not deemed to be functioning at an advanced level. Advanced practice was:

"not an additional layer of practice to be superimposed on specialist practice. It is rather, a description of an important sphere of professional practice which is concerned with the continuing development of the professions in the interests of patients, clients and the health services."

(UKCC, 1994:20)

The clinical orientation of the specialist practitioner was evident, but this was not so manifest in the definition of advanced nursing practice. Given this situation it appeared, at the time, as though advanced nursing practice in the UK might assume a more academic guise emphasising professional development rather than patient care or clinical practice.

Literature from other countries however revealed a definitive focus on practice. In Australia this was evident in the work of Sutton and Smith (1995) who stated that:

"For advanced nurse practitioners, the client is the centre of that world".

(Sutton and Smith, 1995:40)

In the USA a very strong practice component was evident in the work of Dracup (1994), Dracup et al (1994), Keane and Richmond (1993); Naylor and Brooten (1993) and Bullough (1992). It was also evident in the definition of advanced nursing practice provided by the American Nurses Association:

"nurses in advanced clinical practice have a graduate degree in nursing. They conduct comprehensive health assessment, demonstrate a high level of autonomy and expert skill in the diagnosis and treatment of complex responses of individuals, families and communities to actual or potential health problems. They formulate clinical decisions to manage acute and chronic illness and promote wellness. Nurses in advanced practice integrate education, research, management, leadership and consultation into their clinical role and function in collegial relationships with nursing peers, physicians and others who interface with the health environment."

(cited in Pokorny and Barnard, 1992:6)

Soon after this time the UKCC discontinued work associated with advanced nursing practice (UKCC, 1998a; 1997a) and concentrated on the development of a specialist level of nursing practice (UKCC, 1998a). This included the merger of nurse practitioners and clinical nurse specialists within the specialist framework (UKCC, 1997b). However, once this work was complete (UKCC, 1998b) exploration of 'higher level practice' was commenced and draft descriptors were circulated (UKCC 1998c; 1999a) for comment by the profession. This development is analysed in the final chapter of the thesis (Section 6:4:3).

In summary, the importance of patient care and clinical practice to nurses in advanced practice roles was evident outside the UK and was reflected in the titles nurse practitioner (USA), clinical nurse consultant (Australia and New Zealand) and clinical nurse specialist (USA and Canada). Exploration of these roles, in terms of the aims of the current study, appeared valid. However, due to the different interpretation of role titles in different countries it would be necessary to ensure that participants invited to participate in data collection reflected an appropriate advanced practice title for that particular country. It was also apparent that, in all the countries

visited and in the UK, roles which could not demonstrate direct involvement with patients, such as the clinical nurse specialist role in the USA and Canada and the clinical nurse consultant in Australia and New Zealand, were being rescinded (Vollman and Stewart, 1996). In contrast those with direct patient contact and a defined patient caseload, such as nurse practitioners, were on the increase.

The practice orientation of nurses engaged in advanced nursing practice was also the subject of much debate within the literature. Role titles inferred a certain form of nursing practice which also appeared to confer a value judgement. An example of this was the term nurse practitioner. Nurse practitioners were often associated with the assessment, diagnosis and treatment of a person with a particular disease (Smith, 1995) and this was seen to equate with the practice of medicine rather than that of nursing (Manley, 1996; Parse, 1993). As Rogers (1975) argued, nurse practitioners had to all intent and purpose left the nursing profession and should be forced to drop the title 'nurse' because they had moved into the orbit of medicine. However, this view did not reflect the practice orientation of nurse practitioners in later literature. Alongside the skills of assessment, diagnosis and treatment it was also evident that lifestyle modification, helping patients deal with illness, improvement to the quality of service provided and the support and education of other nurses (Savage, 1996) were also distinct features of the nurse practitioners role. These latter examples were more frequently associated with the practice of clinical nurse specialists, whose orientation was thought to be more representative of nursing.

However, experience of differing forms of advanced nursing practice in different countries, gained during this study, revealed that some clinical nurse consultants in Australia functioned in a similar manner to nurse practitioners in the USA, for example, in the management of heart failure patients. This has been supported in the literature which suggests that, in practice, there may be large areas of overlap between clinical nurse specialists (similar to clinical nurse consultants in Australia - section 4:4) and nurse practitioners in the USA (Page and Arena, 1994; Williams and Valdivieso, 1994). Titles therefore did not necessarily provide an accurate representation of the practice orientation of nurses engaged in advanced nursing practice nor could a mutual interpretation of any of the role titles be assured. Therefore, the term 'advanced practice nurse' was used throughout the thesis to denote nurse practitioners, clinical nurse specialists and clinical nurse consultants.

Discrepancies were also apparent in the level and type of education necessary to prepare advanced practice nurses. Many authors, representing different countries, were united in the view that postgraduate education was the most appropriate level of preparation (Gilliss, 1996; Manley, 1993; Mirr, 1993; Watson, 1993; Keane and Richmond, 1993; Bullough, 1992; Hamric and Spross, 1989). However, postgraduate education was not seen as an essential requirement by the UKCC (UKCC, 1996), although many universities in the UK began to develop advanced nursing practice curricula at this level (Woods, 1997). It was assumed at the beginning of this study, wrongly in fact, that Australia also supported postgraduate education in the preparation of clinical nurse consultants. This was based on the knowledge that nurse education had moved into the higher education sector at an earlier date than that achieved in the UK. The reality of the situation will be made evident in section 4:4.

The postgraduate educational preparation of nurse practitioners was 'generalist' (American Association of Colleges of Nursing, 1995) and standardised, even for those working in acute and critical care settings. That is to say, knowledge and skills (e.g. physical assessment, pharmacology) were taught but the individual nurse had to apply the principles taught to particular patient groups. The curriculum developed by the National Organisation of Nurse Practitioner Faculties (NONPF) has been used outside it's country of origin (USA) and many courses in the UK utilise this framework (Cox, 2000). Experience gained during data collection, for this research study, revealed that the 'generalist approach', described above, had resulted in many nurses relying on knowledge and experience gained prior to undertaking postgraduate education to inform their specialist practice following graduation and accreditation. Those who had not gained appropriate experience, in the speciality within which they were employed, were seen to be at a disadvantage by some of the participants in the study as will be seen during analysis of the data (Chapter 5). This raised several questions. Firstly, how much experience was required before sufficient knowledge had been gained in the care and management of the critically ill before a readiness to undertake postgraduate preparation for advanced nursing practice was evident? Also, was the attainment of a postgraduate degree the only criteria which should be used to indicate an ability to practice at an advanced level, or should type and length of experience also be factored into the equation?

The content associated with educational preparation of the clinical nurse specialist differed both within and between countries. Clinical nurse specialists (USA and Canada) received 'specialist' postgraduate education related to their area of practice. That is to say, knowledge specifically related to a speciality area of practice was taught (e.g. intensive care). These programmes, which are now less common due to the reduction in CNS numbers indicated above, also included content which had a greater professional than clinical bias. Frequently content associated with professional development concentrated on the sub-roles identified by Hamric and Spross (1989) of research, education, consultancy and practice aimed at developing professional leaders and critical thinkers (Cronenwett, 1995). In the UK, postgraduate education in advanced nursing practice tended to follow a mixture of the above programmes. For example physiology, physical assessment and pharmacology were integrated with research and professional skills workshops such as management of change (MSc Professional Skills Handbook City University, 1999). These different approaches to curriculum development and content also begged the question; if postgraduate education is desirable in the preparation of advanced practice nurses, what content is most relevant?

International comparison, based on the literature and personal experience did indeed demonstrate considerable discrepancies. This was particularly evident in terms of title, practice orientation and educational preparation between individual hospitals, universities, states in both the USA and Australia and other countries. However, despite these disparate factors it was felt that, during observation of advanced practice nurses, new and distinct opportunities were evident in the delivery and outcome of patient care and management. It was the exploration of this phenomenon which provided the impetus for the study.

2:2 Organisational Structures and Interpersonal Relationships

Other compelling features associated with the concept of advanced nursing practice in adult critical care also arose during the first year of the study. These were the social construction of advanced practice roles in nursing and the impact of interpersonal relationships. The organisational structure of a particular hospital appeared to be a powerful determinant of the socialisation of the role (Kozier et al, 1992) and the social identity of the individual nurse. Major features which could limit

the success of initiatives to improve adult critical care services for patients were the delineation of professional boundaries and the operation of hierarchical systems. Personal reflection, during data collection and analysis, suggested that bureaucratic values often appeared to be inconsistent with the professional values of the advanced practice nurse. This has been described by Ahmadi et al (1987) as the professional - bureaucratic conflict. However, more collaborative interpersonal relationships with other professional groups were evident in certain areas and this appeared to be associated with improved patient services.

It is impossible to avoid bias when undertaking research, as no action can be value free. However, the process of gaining theoretical sensitivity enabled reflection upon the assumptions underpinning this research. Those relevant to the current study were as follows:

- Labels and definitions denoting advanced nursing practice did not encompass the range and depth of advanced nursing practice in adult critical care. Clarification was required if advanced nursing practice were to be made visible in the UK.
- Exploration of various advanced practice roles may reveal the essence of advanced nursing practice in adult critical care.
- Formal educational preparation, leading to the award of degrees, contributes to the attainment of advanced nursing practice but may not automatically guarantee an advanced level of nursing practice.
- Bureaucratic values appeared to be inconsistent with the values of the advanced practice nurse. Collaborative practice appears to be associated with the presence of advanced nursing practice.

2:3 Evaluation of Advanced Nursing Practice

There were two distinct areas of research associated with the topic of advanced nursing practice. The first was associated with discerning the impact of clinical nurse specialists on patient outcome. The second represented comparison of nurse practitioner and physician roles in relation to patient outcome.

As has been demonstrated earlier in this chapter, direct and indirect care provision by advanced practice nurses demonstrates the major difference in practice orientation between NPs and CNS/CNCs. There have only been a few studies which sought to evaluate the impact of clinical nurse specialists on patient outcome (Hanneman et al, 1994; Ingersoll, 1988). Studies which focused on patient related documentation (Georgopoulos and Christman, 1990) had been undertaken but these evaluated a representation of nurse related activity rather than actual activity. All of the studies which focused on patient outcome demonstrated the difficulty of controlling variables due to the indirect nature of the CNS role (Hanneman et al, 1994). That is to say, patient outcomes may have been due to a number of extraneous factors and were not directly attributable to the role of the CNS.

In contrast, a considerable amount of research activity has focused on comparison of the NP and Physician role, in order to evaluate the impact on patients/families of a direct caregiver, (Mundinger et al, 2000; Richardson and Maynard, 1995; Mundinger, 1994; Brown and Grimes, 1993) in terms of outcome and/or cost savings. However, many of the studies addressed primary care, whereas the context of this study was adult critical care. They were also flawed by a lack of homogeneity between nurse/physician groups (Levine et al, 1976), outcome assessed by physician opinion rather than empirical measures (Rabin and Spector, 1980); small sample sizes (n = 2) (Spitzer et al, 1974) and unrepresentative physician groups (Fottler, 1982).

Only one study could be found which reviewed the care activities and outcomes of Acute Care Nurse Practitioners (ACNP), Physician Assistants (PA) and Resident Physicians (Rudy et al, 1998). The combination of both ACNPs and PAs skewed the data, therefore the results cannot be said to be solely representative of ACNPs. Comparison between groups did not take place whilst Resident Physicians were in the first month of their rotation. This was understandable in research terms as it reflects efforts to match the sample groups. However, it did not reflect clinical reality. This was unfortunate as it would have allowed for an appraisal of the difference, or otherwise, between stable, consistent practitioners (ACNPs/PAs) and rotating staff who may be inexperienced within the speciality and are still in training (Resident Physicians). The results indicated that resident physicians managed patients who were more critically ill and undertook more invasive procedures. Patient outcomes were similar, as measured by APACHE 3 (Knaus et al, 1991), but it should be borne

in mind that the patients were more critically ill in the resident group and this indicated physicians possibly achieved better outcomes.

In both primary and acute care sectors, given the limitations of the research indicated above, nurse practitioners did not appear to provide a service which had a deleterious effect on patient outcome (Mundinger 2000). However, it is questionable whether it was appropriate to compare those still in training (residents) with nurse practitioners who have more than five years experience in the speciality and provide a consistent presence (Keane et al, 1994). Another pertinent issue associated with professional 'boundary' research is that measures of patient outcome are not necessarily sensitive to the influence of nursing in general and advanced practice nursing in particular. It might be argued that comparison is futile because advanced practice nurses offer a qualitatively different service to that offered by medical staff (Ingersoll, 1995).

This was demonstrated by Hill et al (1994), where primary care patients were randomly assigned to medical consultants and nurse practitioners. At the end of the study outcomes from both studies were similar in terms of biochemical, physical and psychological measures. However, patients assigned to the nurse practitioner groups demonstrated improved pain control, better knowledge of their disease and higher overall satisfaction with their care than those receiving conventional care. These factors demonstrate the potential influence of the advanced practice nurse over patient outcome. As Smith (1995) has indicated:

"Advanced practice nursing is not filling the gap with medical care where it does not exist; it is filling the existing gap in health care with ... nursing practice."

(Smith, 1995:2)

It was not the intention of this research study to evaluate the impact of clinical nurse specialists nor to compare nurse practitioners and physicians. Rather, the intent was to establish a model of advanced nursing practice which was independent of role title and practice orientation; and to represent the social processes which could inhibit or promote advanced nursing practice in the care of the critically ill. As such it represented a departure from previous research. However, although theoretical

explanations of advanced nursing practice were apparent within the literature clarity had not been attained, as previous discussion within this chapter has demonstrated. At the beginning of this research study (1996) no theoretical descriptions of advanced nursing practice had been derived through research, although it is evident from the following discussion that some do now exist.

2:4 Theoretical Descriptions of Advanced Nursing Practice

The purpose of the following discussion was to compare and contrast current theoretical descriptions of advanced nursing practice and to establish the current status of theoretical development. The contribution of the current research study to nursing knowledge could then be extrapolated in the final chapter. A number of models exist which seek to represent advanced nursing practice (Styles, 1996). Comparison was difficult because the initial purpose of theoretical construction and the process of developing models varied. A lack of consistency in terms of definitions and terminology was also evident. Six models have been identified for the purposes of discussion:

- A Model for Advanced Nursing Practice (Calkin, 1984)
- The Shuler Nurse Practitioner Practice Model (Shuler and Davis, 1993a; 1993b)
- A Model of Advanced Practice (Ackerman et al, 1996)
- A Conceptual Framework for Advanced Practice (Manley, 1997)
- The Circle of Caring: A Transformative Model of Advanced Nursing Practice (Dunphy and Winland-Brown, 1998)
- The Synergy Model (Moloney Harmon, 1999)

It should be noted that the work of Moloney Harmon (1999) was based on earlier work undertaken by Curley (1998) which sought to integrate patient need with nursing competence and enhance patient outcome. The results of this work were to form the basis of the American Association of Critical-Care Nurses Certification programme. It focused on the potential contribution of all nurses to the care of the critically ill. This delineation of the nurse's role in adult critical care resulted from the increased employment of unlicensed assistants and lower nurse:patient ratios in the critical care units of the USA. Moloney Harmon (1999) developed the model further

in order to distinguish the potential impact of clinical nurse specialists on both critically ill patients, nurses working within adult critical care and on the health care system. However, the importance of outcome appraisal in terms of patients, nurses and hospital systems, although emphasised by Curley (1998) was not addressed by Moloney Harmon (1999). The model therefore describes the activity of CNS's, in critical care, but does not indicate the proposed impact of the role. The model developed by Ackerman et al (1996) later became known as the Strong Model of Advanced Practice (Mick and Ackerman, 2000).

Two of the models identified above were developed within adult critical care (Moloney Harmon, 1999; Manley, 1997). One related to the acute care nurse practitioner (Ackerman et al, 1996). The remaining models were applicable to both primary and acute care. The framework for the discussion considers the process through which each model was derived, the purpose for developing the model and the main findings.

Approaches to model development differed between authors. Dunphy and Winland-Brown (1998); Shuler and Davis (1993a; 1993b) and Calkin (1984) utilised deductive approaches. Those remaining were inductively derived using varying methodologies such as action research (Manley, 1997) and modified delphi techniques (Moloney Harmon, 1999; Ackerman et al, 1996). Inductive approaches, such as the grounded theory approach utilised in the current study, to knowledge development are more likely to represent a breadth of experience from those engaged in advanced nursing practice. Deductive theory generation often represents a narrower view which frequently reflects the perspective of one or two individuals. Therefore it may not be representative of those working in advanced practice roles.

All the models reviewed sought to delineate the nature of advanced nursing practice. Calkin (1984) did not seek to distinguish between direct (nurse practitioner) and indirect (clinical nurse specialist/consultant) forms of the role, indicated in the preceding discussion. However, the remaining examples did reflect a separatist stance. The work of Moloney Harmon (1999) portrays the domain of the clinical nurse specialist; Manley (1997) presents a conceptual framework for the consultant

nurse; where Shuler and Davis (1993a; 1993b); Ackerman et al (1996) and Dunphy and Winland-Brown (1998) delineate the role of the nurse practitioner.

However, common themes can be identified where the purpose of theoretical development was to depict advanced nursing practice as a practice model. The purpose of developing a practice model is the derivation or application of various domains and/or competencies in order to characterise a particular role and make it visible (Ackerman et al, 1996; Moloney Harmon, 1999; Manley, 1997; Shuler and Davis, 1993a; 1993b). The result of this work led to a large number of domains, subroles, dimensions and competencies being identified. These were remarkably similar despite the apparently different practice focus of each group as direct and indirect caregivers. This was particularly evident in the work of Ackerman et al (1996); Moloney Harmon (1999) and Manley (1997). Different terminology was used within the models but it appeared likely that the terms used were synonymous. For example Manley (1997) applies the sub roles of expert practitioner, educator, researcher and consultant (Hamric and Spross, 1989). These are reflected as domains by Ackerman et al (1996) and dimensions by Moloney Harmon (1999). The correspondence of these attributes is indicated in Table 1.

Table 1: Sub roles, domains and dimensions of advanced practice models

Manley et al 1997	Ackerman et al (1996)	Moloney Harmon 1999
Sub roles	Domains	Dimensions
Expert Practitioner	Direct, comprehensive care	Clinical Judgement Caring Practices Response to diversity
Educator	Education	Facilitator of Learning
Researcher	Research	Clinical Inquiry
Consultant	Support of Systems	Systems thinking

It can be seen that similarities do exist in the focus and practice domains of both nurse practitioners and clinical nurse specialists in delineating the advanced practice role. The decision to incorporate all advanced practice roles in the current study appears justified given the similarities outlined in Table 1.

The sub roles of researcher, educator, expert practitioner and consultant, developed by Hamric and Spross (1989) were prevalent in much of the literature associated with advanced nursing practice (Dawson and Benson, 1997; Gawlinski and Kern, 1994; Nuccio et al, 1993; Fenton 1985). However, as Moloney Harmon (1999) states the four sub roles identified by Hamric and Spross (1989), no longer reflect the entirety of contemporary advanced nursing practice. Further associations, within the models were also evident (Moloney Harmon, 1999; Manley, 1997; Ackerman et al 1996). These included the importance of leadership and the management of change. Distinctive elements within the models included conceptual strands of collaboration, empowerment and scholarship (Ackerman et al, 1996); the importance of advocacy (Moloney Harmon, 1999) and an emphasis placed on the potential impact of "*transformational leadership*" upon the culture of intensive care nurses (Manley, 1997:185). Ackerman et al (1996) and Moloney Harmon (1999) also emphasised the importance of publication and professional leadership. In the representation of these models the initial purpose of theoretical formulation was met, advanced nursing practice was made visible and secondary purposes such as curriculum development, policy initiatives and regulatory measures could be attempted.

Shuler's Model of Nurse Practitioner Practice (Shuler and Davis, 1993a; 1993b) represented advanced nursing practice within the metaparadigm of nursing (Fawcett, 1995). It included the theoretical constructs: patient need, nurse patient interaction, health and environment. The last of which was not a construct but a concept within the model. The model aimed to place the activity of nurse practitioners within the domain of nursing, rather than that of medicine. However, it was difficult to appraise how the concepts within the model differed from those common to all registered nurses. It may, perhaps be more appropriately represented as a model of nursing, rather than one which depicted an advanced level of practice.

Dunphy and Winland-Brown (1998) appeared sensitive to the claims made by Rogers (1975) and Parse (1993), outlined earlier in this chapter, that nurse practitioners function within the domain of medicine. Development of the model, *The Circle of Caring: A Transformational Model of Advanced Nursing Practice*, was based on a desire to present the unique contribution made by nurse practitioners to the health and welfare of patients and their families. It differed from the conceptual framework offered by Manley (1997) where transformational leadership was associated with the development of nurses rather than directly influencing patient care. However, depiction of the model indicated that advances in nursing practice would automatically benefit patients.

Dunphy and Winland-Brown (1998) also emphasised the fragmentation of current health care provision, indicated in the first chapter of this thesis, and the negative impact of this on patient and family welfare. Another focus was the mechanistic perspective of diagnosis and therapeutic intervention inherent within medicine and nursing. In particular nursing diagnoses were identified as a reactive stance, which attempted to differentiate nursing from medicine when instead a more proactive conceptualisation of the nurse:patient relationship was required. The model, therefore, invoked a theory of caring, developed by Boykin and Schoenhofer (1993), which emphasised the interpersonal processes inherent within the nurse:patient relationship. An ethic of care was also evident within the findings of this research study and this will be discussed in the final chapter.

There were four major tenets within the model, *The Circle of Caring: A Transformational Model of Advanced Nursing Practice*, which represented this focus. Firstly it was important to hear the patient's story from their perspective as well as eliciting the meaning of health from the patient/family. As a result the contextualised nature of the health problem emerged i.e. the lived experience. The use of democratic terminology, replacing medical and nursing diagnoses, was also recommended and termed democratic terminology. An example of this was stroke or heart failure, rather than cerebrovascular accident or congestive cardiac failure. Choice of intervention was also considered with the patient and an emphasis placed on working with the patient and the incorporation of personal goals.

Calkin (1984) considered patient response to illness utilising a statement from the American Nurses' Association, which reflected a preoccupation with diagnosis in contrast to the model developed by Dunphy and Winland-Brown (1998), which reflected an emphasis on care:

"nursing is the diagnosis and treatment of human responses to actual or potential health problems."

American Nurses Association. Social Policy Statement (1980:9)

The purpose of the model developed by Calkin (1984) was for nurse administrators to distinguish various forms of nursing practice for employment purposes. The model delineated the range of responses made by patients and those recognised by nurses who were Beginners, Experts by Experience and Advanced Nurse Practitioners. Experts by Experience were thought to recognise a broad range of common responses. Whereas advanced nursing practice was distinguished through the recognition of responses which were increasingly diverse and unusual. This compared with the levels of nursing practice indicated by Benner (1984; Benner et al, 1996) of novice, advanced beginner, competent, proficient and expert. However, Benner (1984; 1996) did not utilise selection criteria in her research which required Masters preparation, although some participants had undertaken postgraduate education. Therefore it was difficult to extrapolate if the experts in Benner's study (1984, Benner et al, 1996) were experts by experience or those who exhibited expert practice as one of the domains of advanced nursing practice and had successfully undertaken postgraduate education (Manley, 1997; Hamric and Spross, 1989).

Calkin (1984) indicates there were three main occasions when advanced practice nurses were required. Firstly, if there was a high degree of unpredictability in the patient population. Secondly, where there were new conditions or new patient populations. Lastly, where there was a wide variety of health problems. Advanced nurse practitioners were said to recognise a broad range of patient response, both negative and positive which beginners and experts by experience did not. A close association between the patient and the advanced practice nurse was maintained throughout the model. An assumption within the model was that increasing the number of positive responses made by patients would result in high quality patient outcomes, but no specific criteria were identified to enable evaluation of this.

In summary, what has been achieved by the models reviewed thus far is the identification of what advanced practice nurses do, or should do, rather than indicating the impact advanced nursing practice might have on the patient or family. Essentially these represent practice models, useful for curriculum purposes (Moloney Harmon, 1999; Ackerman et al, 1996; Shuler and Davis, 1993a; 1993b) and employment purposes (Calkin, 1984). Also demonstrated was the impact advanced practice nurses may have on the culture of nursing in intensive care (Manley, 1997) and the transformational nature of the advanced practice nurse/patient relationship (Dunphy and Winland-Brown, 1998). The derivation of domains, dimensions and sub roles enables those who have little understanding of the advanced practice role to understand its complexity.

2:5 Summary and Conclusions

The research question and aims which provided the impetus for the present study represented a departure from current research and theoretical description in a variety of areas. Firstly, an inductive approach to theory development was taken which incorporated the three major role titles associated with advanced nursing practice. It also involved participants who were currently in practice. This was in contrast to other inductive theoretical explanations which focus on the activity of an individual (Manley, 1997) or rely on the views of faculty members predominantly (Moloney Harmon, 1999; Ackerman et al, 1996). It was hoped that the essence of advanced nursing practice would emerge independent of role title, practice orientation or predetermined subroles (Table 1). All the theoretical extrapolations outlined above also failed to address the social processes which may constrain or facilitate advanced nursing practice. A final expectation of this research study was that the model would form the basis for evaluation of advanced nursing practice in adult critical care. This again formed a departure from the current knowledge base associated with advanced nursing practice, where evaluation focused upon a single variable or concentrated on comparison between the services delivered by differing professional groups.

Burgeoning theoretical sensitivity to the conundrum of advanced nursing practice in adult critical care made it increasingly evident that, in order to capture the essence of advanced nursing practice in adult critical care, grounded theory methodology would need to be placed within the constructivist paradigm if the social construction of the role were to be captured. There has been much controversy surrounding the philosophical roots of grounded theory. Some authors place it in the post positivist or modernist era (Denzin and Lincoln, 1998a), others argue its development over time, now places it within the constructivist domain (Annells, 1997a; 1997b). The following chapter will address various paradigmatic perspectives relevant to the grounded theory debate and their relevance to the main aims of this study.

CHAPTER 3

Paradigmatic and Theoretical Perspectives

At the inception of the study discussion, within the profession, was vociferous concerning the nature of advanced nursing practice. In particular, this related to the debate outlined in the previous chapter concerning titles, direct and indirect forms of practice, level of education, theoretical description and the pertinence of comparison with other professional groups. These arguments were of concern because their influence might have resulted in bias during data collection. For example the sample group might be restricted to only one of the advanced practice roles described or the interview schedule would only have addressed prevalent issues within the nursing press. Therefore, to gain a wider appreciation of advanced nursing practice and avoid the influence of others' value judgements, the theoretical foundation which underpins grounded theory, symbolic interactionism, was explored and utilised to establish the first interview schedule (Appendices 2 and 6). In exploring symbolic interactionism various issues arose. Chiefly these related to the paradigm debate instituted by Glaser following publication of Strauss and Corbin's (1990) text describing the processes inherent to grounded theory and the further elaboration of symbolic interactionism by Denzin (1992, 1989a). The primary focus of this chapter is therefore to explore the debate which surrounds the utilisation of grounded theory methods and to indicate how these influenced the direction of the study.

The choice of grounded theory methodology, as an appropriate vehicle to explore advanced nursing practice in adult critical care was not without its critics (Annells, 1997b). This debate will now be explored beginning with an account of various paradigmatic perspectives which currently prevail; discussion of the schism which developed between the founders of grounded theory and exploration of the theoretical foundation of the methodology. Theoretical development and scope will then be defined in order to establish the connection between the theoretical foundation of grounded theory methods and the theory generated following their utilisation. The chapter will conclude with a rationale for the choice of grounded theory methodology in the exploration of advanced nursing practice in adult critical care.

3:1 Paradigmatic Perspectives

Denzin and Lincoln (1994) identified five historical moments in which fundamental beliefs about how knowledge may be derived and developed were expounded. The use of the term 'moments' was perhaps unfortunate because it implied a form of chronological exactitude, whereas the 'moments' described below demonstrate a progression of ideas in relation to the notion of truth, epistemology and methods of uncovering truth. Perhaps the ideas expressed over the last century might more aptly be described as a paradigmatic spectrum. Currently, all the paradigmatic perspectives, described below, exist within health care research. What often stimulates choice of paradigm, or world view about the nature of systematic inquiry, is the professional background of a particular researcher. Therefore, it is more usual for medicine to value positivist beliefs regarding truth, whereas sociologists might be influenced by postmodernist ideals. However, Annells (1997a:176) contends that the holding of a particular world view as the only method of developing knowledge may well become a *"redundant concept"* as *"multiple paradigms of inquiry occupy the stage"*. It may be argued that what should guide choice of paradigm, theoretical perspective and methods is the particular research question being asked and the aims of the investigation. Two particular aims of this thesis were to explore the socialisation of those engaged in advanced nursing practice in adult critical care and to develop a theory which delineated the concept. Therefore, the use of grounded theory methods appeared appropriate as they enabled examination of social processes and aided the generation of theory.

The first moment described by Denzin and Lincoln (1994) was the traditional era which was said to have gained pre-eminence in the first five decades of this century. The traditional era was interpreted as positivist in essence. The positivist stance imbued reality as objective and truth evident if hypothetical constructs demonstrated a significant difference between two states pre-determined by the researcher. Positivists based their research on 'a priori' theoretical statements, that is to say, through the process of deductive reasoning a general principle or theory is used to predict effects and establish facts.

The following twenty years reflected the rise of the modernist (the second moment) or post positivist era. It was acknowledged that an objective reality was questionable because facts generated through hypothetical deduction were subject to interpretation. This introduced subjectivity in the person of the interpreter. However, 'a priori' knowledge was still deemed to be of importance, and truth seen as evident, if findings corresponded and were coherent with established theory. The post positivist or modernist era pursued the issue of researcher bias. It emphasised the importance of falsification in order that findings should not be predetermined by the researcher.

The period from 1970 to 1986 (the third moment) was labelled "*blurred genres*" (Denzin and Lincoln, 1994:9). Here the subjective nature of reality and the importance of the individual's construction of experience began to gain acceptance. It should be acknowledged that although this movement began in the first half of the century it was not a widely accepted world view at that time given the dominance of the positivist paradigm. Labels describing the paradigm were "*naturalistic inquiry*" (Lincoln and Guba, 1985:1) or "*interpretive genres*" (Denzin and Lincoln, 1994:9). The core tenets of this approach suggested reality was multiple, given that all individuals have different interpretations of a particular experience. As a result of this, statements of absolute truth could not be made utilising the vehicle of research, as truth depended upon the individual's interpretation of events and the researcher's world view.

Therefore it was important that those supplying the data should be represented faithfully and this led to what Denzin and Lincoln (1998a:19) termed, a "*crisis of representation*", and labelled the fourth moment (1986 - 1990). The process of naturalistic inquiry was criticised for its lack of rigour, in terms of validity and reliability, and the subjective interpretation of events and experience. In particular it was difficult to represent individual experience in a coherent manner. Also the individual could never be represented faithfully due to the interpretive stance of the researcher. Naturalistic inquiry was replaced by the term, constructivist paradigm (Schwandt, 1998). The constructivist paradigm assumes a relativist ontology in which there are multiple realities, a subjectivist epistemology where the researcher (knower) and subject (participant) create understanding utilising a naturalistic (in the natural world as opposed to a laboratory) set of methodological procedures. Rigour is established through a review of the trustworthiness of the knowledge derived. This

included processes such as credibility, transferability and auditability to replace the positivist and modernist terms validity and reliability, as evaluative criteria (Denzin, 1998a; Parsons, 1995).

There emerged in the last decade of the twentieth century the post modern era (the fifth moment), which was characterised by a continued preoccupation with the representation of the 'other'. That is to say, how is it possible to represent the world view of the 'other' without representing it as a construction of the researcher (Parsons, 1995). Another central theme of postmodernist thinking was the ubiquitous nature of power in social relationships (Porter, 1996b) and that the formation of knowledge is an expression of power. Postmodernism, therefore, sought to reveal the experiences of the oppressed, in their own terms. Analysis involved deconstruction of various forms of information (media, architecture, oral histories), associated with the oppressed, and the influence of power relationships and surveillance, by various authorities, upon these.

Lincoln (1995:37) has delineated issues associated with a "*sixth moment*" of scientific debate. Attention has been drawn to the ethics of naturalistic inquiry. Particular concern has been associated with current forms of consent which do not really address all the issues which may arise during data collection. Also, participants may frequently be unaware of the implications of participation. Finally, Lincoln (1995) raises the issue of ownership, arguing that if text is to be presented with little or no interpretation then ownership, and therefore publication, may rest with the participant rather than the researcher. However, these concerns appear to reflect the changing nature of scientific discourse, indicating the need to make scientific discussion and presentation accessible to both participants and the public, rather than a major ontological or epistemological transition.

There were several key elements from the preceding discussion which directly influenced the current research study. In particular it appeared that the construction of a model to depict advanced nursing practice in adult critical care would be influenced by the interpretive stance of the researcher. In order to achieve some form of mutual creation between researcher and participants it was therefore necessary to ensure participation in the co-creation of the model. In turn, this raised the issue of ensuring the trustworthiness of the theory generated. To address these elements, three initiatives were undertaken. Key participants were invited to

comment upon publication of the preliminary findings; the developing model was used to inform data collection during participant and non participant observation episodes; and a key participant and co-analyst were asked to challenge and debate the developing theory as it emerged. These particular components of the study will be described in more depth in the following chapter.

The above discussion represents paradigmatic transition over the last century, in relation to the nature of truth and the development of knowledge. Grounded theory was not immune to the impact of these transitions. Therefore, some understanding of the various perspectives taken concerning the use of grounded theory methods is necessary to appreciate the nature of the following debate.

3:2 Paradigmatic Schism and Grounded Theory Methods

Grounded theory methodology emerged from the second of the paradigmatic moments, the modernist or post positivist era. The aim was to derive 'theory' from the perspective of those experiencing a particular phenomenon, for example awareness of dying (Glaser and Strauss, 1965). The methodology of grounded theory was first described by Glaser and Strauss (1967). However, a major reorchestration of grounded theory methodology was presented in 1990, by Strauss and Corbin. This was roundly criticised by Glaser, who in 1992, published a rebuttal of the methods described by Strauss and Corbin (1990). The basis of the criticism lay in what Glaser saw as a return to the positivist era due the emphasis placed on verificational inquiry within the 1990 text.

This rebuttal led to the exploration, by the researcher, of original texts written by Glaser (1998; 1992; 1978); Strauss and Corbin (1998; 1997; 1990) and Corbin and Strauss (1994). Strauss and Corbin (1998; 1990) certainly offered a structured approach to the process of constant comparative analysis. They also suggested that the analytic methods identified were of such depth and rigour that testing of the generated theory became redundant. But were these processes so different to Glaser's own analytic procedures?

Glaser suggested the process of coding data revolved around "*substantive coding*" (Glaser, 1998:16), which bore a strong resemblance to the "*open coding*" of Strauss

and Corbin (1990:61) and emphasised category generation. *"Theoretical coding"*, as described by Glaser (1998:163) again appeared contiguous with the *"axial coding"* of Strauss and Corbin (1990:96), where the same terms, cause, context and consequence were used to identify the conditions within which the phenomenon being explored existed. However, Strauss and Corbin (1990) also required the consideration of strategic and intervening conditions which address actions and interactions; and the factors which facilitated or constrained these. This represented the early influence of the pragmatist Dewey and symbolic interactionism upon Strauss. Given that one of the main aims of the current study was to explore the social processes of advanced nursing practice in adult critical care Strauss and Corbin's (1990) delineation of the analytic process appeared both appropriate and more accessible than that of Glaser (1992; 1998).

Glaser (1998:137) also utilised terms more reflective of a positivist orientation in his depiction of theoretical coding. These were *"contingency"* and *"covariance"*. It was not easy to gauge what Glaser meant by these terms but they appeared to relate to situations which were contingent upon other variables and related incidents i.e. covariance. Glaser (1992; 1998) remained influenced by the post positivist stance of Lazarsfeld reflecting an ontological bias towards post positivism or modernism. That is to say, a single reality exists which can be uncovered through the research process, albeit imperfectly apprehended. Epistemologically, Glaser still supported the objectivity of the researcher, in relation to participants, as a regulatory ideal whilst accepting this may not be possible. Finally, according to Glaser, the product of research was the generation of 'grounded' hypotheses which formed the 'grounded theory':

"That is all. The yield is just hypotheses!"

(Glaser 1992:16)

Strauss and Corbin (1990) also reflected something of a post positivist or modernist ontology in the elaborate analytic procedures involved in the process of constant comparative analysis and the assurance that these processes lead to the formulation of verified theory. Robrecht (1995), Stern (1994) and Glaser (1992) all argued that the analytic procedures evident in Strauss and Corbin's (1990) text precluded the emergence of theory from the data. However, the verification process was not one which aimed to test theory, but rather to seek evidence within the data for theoretical

constructs. It was possible for theory to emerge from the data, but the process through which it was derived should be transparent. This appeared to be an important issue, in relation to the current research study, as it was possible that the research findings could appear to be unfounded. It became the aim of the current research to be as transparent as possible in delineating complex analytic procedures involved in grounded theory. To this end the process of analysis and portrayal of the findings are presented in a series of stages representing open (Appendix 14), axial and selective coding (Chapter 5). The process of analysis was then reversed and subjected to an audit trail in an effort to increase the transparency of the analytic process (Appendix 10).

Increasingly Strauss and Corbin (1998; 1997; 1990) demonstrated an ontological bias more reflective of the constructivist paradigm (the fourth moment). Reality was seen as relative to the individuals perspective, and was dependent upon the researcher's interpretation or construction. Subjectivity was seen to enrich the process of analysis, reflecting a transactional relationship between the researcher and the data, where researcher and participant co-create the product of the research. The exploration of a chosen phenomenon is the focus of the grounded theory method, the product of which is the development of inductive theory which has both a practical application and increases understanding of a previously uncharted aspect of human interaction and experience (Corbin and Strauss, 1994). These consequences of the research process appeared more contiguous with the aims of the current research than the delineation of hypotheses suggested by Glaser (1992). Therefore, the analytic procedures described by Strauss and Corbin (1990) were used to construct a theory of advanced nursing practice in adult critical care.

However, the notion of theory construction, as in the development of a paradigm model (Section 4:9), and a preoccupation with rigour have also been criticised from a postmodernist perspective (Annells, 1996). In postmodernism, theory construction was seen to be a redundant activity due to its close association with the ontological perspective of positivism. That is to say, theory represented some form of objective reality. However, the alternative deconstruction proffered by postmodernists appeared to have little pragmatic value in developing an understanding of advanced nursing practice in adult critical care. As Schwandt (1998) cogently states:

"I for one can find little comfort in a form of interpretivism that degenerates into nihilism, where we do nothing but engage in endless parasitical deconstruction and deny the existence of social order and our very selves."

(Schwandt, 1998:249)

The methodology developed by Strauss and Corbin (1990; 1998) was therefore used to answer the research question and meet the aims of this research. The thesis assumed a relativist ontology in which reality was the subject of interpretation; a subjectivist epistemology where the researcher (knower) and subject (participant) created understanding in a naturalistic (in the natural world) context using a set of methodological procedures which led to the construction of an inductive theory and elucidated the phenomenon of concern. Therefore the paradigm in which this research was based was constructivist (Denzin, 1998b; Annells, 1997a; 1997b; 1996). The goal was to achieve a consensus, or failing that provide a basis for negotiation, which defined the nature of advanced nursing practice in adult critical care (Guba and Lincoln, 1994; 1989). The underlying intent of which was to inform the development of advanced nursing practice in adult critical care within the UK.

3:3 The Theoretical Foundation of Grounded Theory Methods

Grounded theory was based upon the sociological theory of symbolic interactionism (Annells, 1996; Stern, 1994; Blumer, 1969; Mead, 1934) which influenced Strauss; and the post positivist perspective of Lazarsfeld which guided Glaser (1998). The current research was based within the constructivist paradigm and assumed a relativist ontology, a subjectivist epistemology and a naturalistic set of methodological procedures. Constructivism moves beyond the telling of stories and requires that theory should be used as a basis for social action (Denzin and Lincoln, 1998b).

This is contiguous with the perspective of Strauss, who supports the paradigmatic features outlined above (Strauss, 1993; Strauss and Corbin, 1990). Therefore, symbolic interactionism forms the preliminary theoretical foundation of the study. The founder of symbolic interactionism was George Herbert Mead (1863 - 1931) and as with the paradigm shifts outlined in the previous section, the theoretical perspective of symbolic interactionism has also undergone transformation and change.

The main assumption of the theory at its inception (Mead 1934) established the fundamental distinction between animals and human beings to be in the conduct of self. Animals were seen to act by instinct in reaction to events, lacking any idea of self. To human beings socialisation was integral to the perception of self. That is to say 'self' may be defined through social roles and expectations inherent within society. Blumer (1969) went on to postulate that the construction of self was a uniquely human trait indicating that the meaning 'things' (other people, institutions, situations) have for people determined the action taken. Meaning was derived from and through social interactions. It indicated a reciprocal relationship between the individual and society which resided in widely shared meanings of the generalised other, rather than mere stimulus response. Human beings were also believed to possess the ability to develop conscious reflexive thought and symbolic communication (Mitchell, 1979; Blumer, 1969). The power to communicate symbolically was crucial in the reflection of self to others and chief amongst the symbolic processes of communication was language.

Beliefs underpinning symbolic interactionism continued to be represented in the work of Strauss (1978) and Goffman (1963). However, criticism of the theory began to mount (Charmaz, 1995). It was evident that the classic representation of symbolic interactionism concentrated on the microprocesses of interpersonal interaction and failed to take into account the influence of macroprocesses such as culture, power and gender. This concern with power demonstrated the rising influence of postmodernism (Section 3:1). Therefore, human experience should be interpreted in the light of the culture from which it proceeded and the influence of power and gender acknowledged. Denzin (1992; 1989a) was responsible for this reformulation of symbolic interactionism and termed it interpretive interactionism. Interpretive interactionism therefore acknowledges that human behaviour is influenced by both interpersonal interaction (microprocesses) and the more global effects of power, gender and culture (macroprocesses).

Anells (1996) suggested that the development of the conditional matrix utilising the methodology described by Strauss and Corbin (1990) indicated an appreciation of the importance of these macroprocesses upon an individual's interpretation of experience and placed grounded theory within the constructivist paradigm. Within the current research both micro and macro processes of interaction were considered

in relation to the social processes which constrained or facilitated advanced nursing practice in adult critical care (Sections 5:4:2; 5:5:2; 5:6:2).

Advanced nursing practice is a socially constructed phenomenon. It exists through the interaction of individuals who share a common purpose where meaning is negotiated and reciprocal relationships established. The contribution of symbolic and interpretive interactionism to this research study therefore aided an understanding of how and why things were as they were through the exploration of the participants working lives. Symbolic and interpretive interactionism also emphasised the manner in which social rules and identities were constructed by individuals through their interaction (Bilton et al, 1987). Therefore, it was pertinent within this grounded theory study to explore the way in which individuals negotiated situations and gained social identity, in relation to advanced nursing practice. Symbolic and interpretive interactionism frequently use the concept of 'career' to guide exploration of the views expressed by participants in identifying the process of negotiation involved in establishing social identity (Bilton et al, 1987). Characteristics of the 'career' path might be said to be learning appropriate behaviour, applying initiative, resisting unwelcome labels imposed by others, utilising opportunities and the identification of success and failure. These attributes allow for the preliminary appraisal of some developmental aspects of advanced nursing practice and as such were used as the basis for the first interview schedule. The derivation of the first interview schedule (Appendix 2) from relevant theoretical perspectives and literature is portrayed in Appendix 6.

In summary, the theoretical foundations of grounded theory methodology urged consideration of the manner in which individuals negotiated their social identity whilst acknowledging the influence of culture, power and gender. The influence of these factors were most readily represented in the current research study through formation of the first interview schedule (Appendices 2 and 6) and consideration of the micro and macro processes which constrained or facilitated advanced nursing practice in adult critical care.

3:4 Theoretical Development and Scope

The purpose of the following discussion is to define and delineate the scope of the different theoretical perspectives which have been, and will be, presented in this thesis. These relate predominantly to those of symbolic and interpretive interactionism and the product of research which utilises grounded theory methodology, such as the current study. Theory may be defined as a structured representation of a phenomenon which is characterised by three major attributes. These are systematic development and portrayal, the tentative nature of the propositions within the theory and that theoretical development has a purpose (Chinn and Kramer 1995). All theories should share these characteristics.

Several terms are used in relation to grounded theory methodology which relate to the scope and application of differing levels of theoretical development. Specifically, the terms are 'grounded', 'substantive' and 'formal' theory, and these will now be clarified. Firstly, grounded theory implies that the theory has been developed from and by those to whom the phenomenon has the greatest meaning i.e. inductively. The alternative to this is that theory is derived deductively by an individual. An example of this is the model of advanced nursing practice derived by Calkin (1984), which was evaluated in Chapter 2.

Glaser and Strauss (1967) discern between the development of substantive and formal theory. Formal theory represents an abstract portrayal of a phenomenon, the propositions of which cannot be tested, but which has a global application. That is to say, it may be applied outside the discipline within which it was developed. This correlates with Fawcett's (1995) classification of grand theories. Examples of this are symbolic and interpretive interactionism which were developed within sociology but have been utilised and applied by other disciplines (Charmaz 1995).

In contrast, substantive theory represents a concrete representation of a phenomenon, which has only a narrow application but from which empirical indicators can be developed which evaluate the propositions postulated by the theory. This equates with Fawcett's (1995) classification of middle range theory. An example of this was the product of this grounded theory study (Figure 5:1; Sections 5:5:1; 5:5:2). The theory resulting from this research, in the first instance only referred to advanced practice nurses working in adult critical care. Although it was

hoped that future development of the model may reveal its application to other areas of nursing. Also, it was represented in a manner accessible to the population intended to benefit from its development (e.g. Figure 5:1). Therefore, the product of this research study was substantive, middle range theory grounded in the experience of those who enacted a variety of advanced practice roles within the context of adult critical care. It was underpinned and influenced by the formal theories, symbolic and interpretive interactionism.

One further point of clarification is required prior to providing a rationale for the use of grounded theory methods in meeting the aims of the research presented in this thesis. Thus far, the terms model and theory have been used interchangeably. One of the primary aims of the research was to develop a model of advanced nursing practice in adult critical care. However, as knowledge of grounded theory methods progressed it became evident that although the representation of theoretical constructs was demonstrated through the portrayal of a model (Figure 5:1), the product of grounded theory was greater than this. Substantive, middle range theory also comprised category definition (Section 5:3), definition of the core category (Section 5:5:1), establishing relational propositions (Section 5:5:2) and the identification of empirical referents (Table 5). This particular aim, therefore, altered over time from model formation to the development of substantive theory.

3:5 Rationale for the Utilisation of Grounded Theory Methods

The ontological and theoretical positions taken in this research have been identified above. Grounded theory methodology appeared to be an appropriate choice as the topic of this research 'advanced nursing practice in adult critical care' had yet to be explored in terms of social processes, structures and interactions. That is to say from a symbolic and interpretive interactionist perspective, within the constructivist paradigm. Models of advanced nursing practice had been developed at the inception of the current research study (Ackerman et al 1996; Shuler and Davis 1993a; 1993b; Calkin 1984) and these were discussed in the previous chapter. However theoretical development, at that time, had only been based on personal, faculty or policy assumptions often to meet the exigencies of curriculum development. None had attempted to view advanced nursing practice from the perspective of those working in a variety of advanced practice roles, specifically

those of clinical nurse specialist, clinical nurse consultant and nurse practitioner. The substantive, middle range theory derived from this research contributes to nursing's body of knowledge by suggesting the conditions necessary for advanced nursing practice in adult critical care to exist (Section 5:4:1). More importantly though, it aids the identification of factors which impacted upon individuals engaged in advanced nursing practice (Section 5:4:2) and made explicit the strategies used by advanced practice nurses to improve the processes associated with patient care, management and outcome (Section 5:4:3).

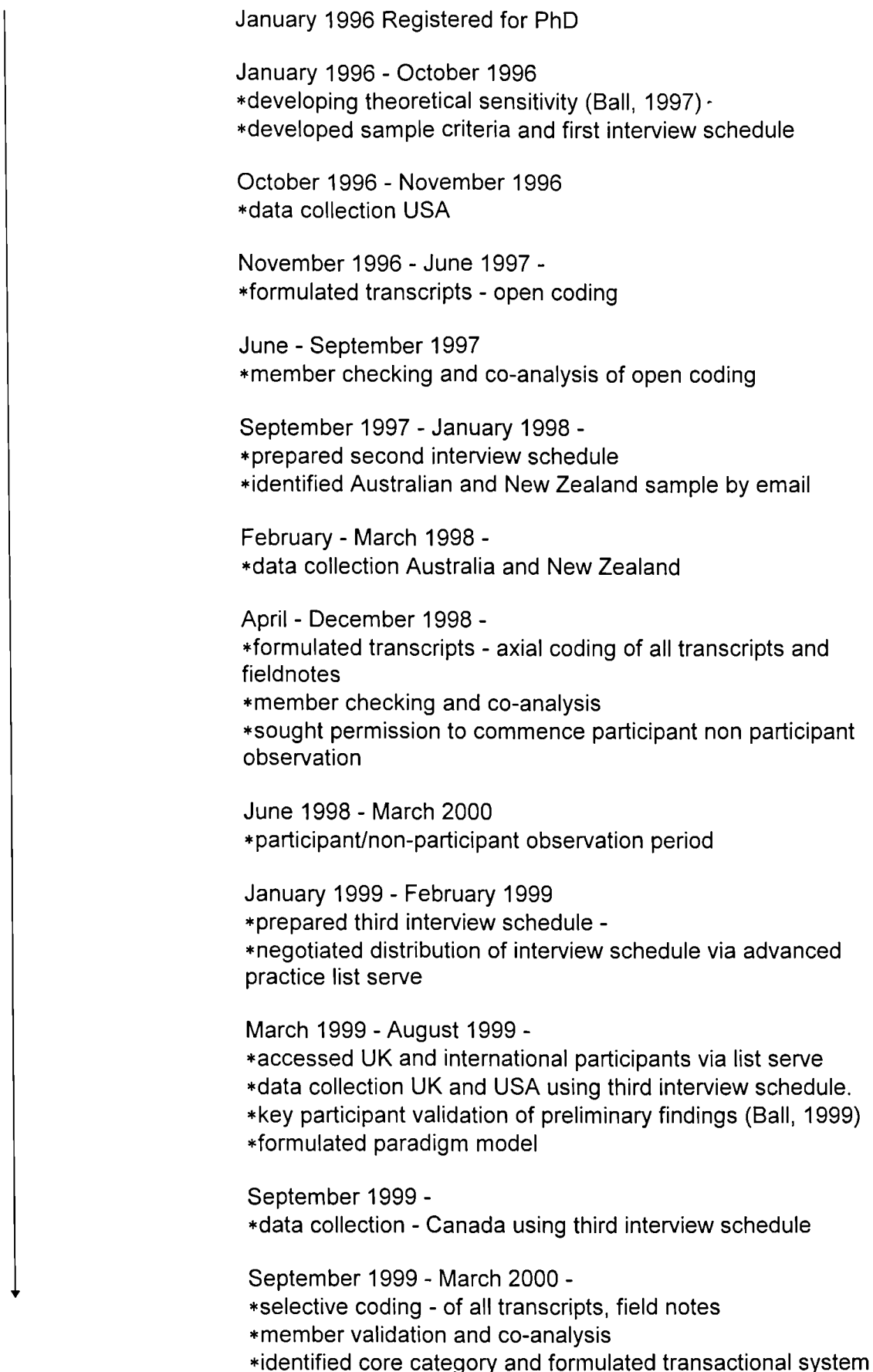
CHAPTER 4

Research Methods

It is the intent of this chapter to utilise grounded theory methods to answer the research question and meet the aims of the current study. To achieve this the context of study will be delineated and the processes associated with the derivation of the sample group and data collection tools described. Analytical procedures will be portrayed and illustrated with examples from the findings of this research. The purpose of this is to reveal the process of analysis as a real, rather than an abstract portrayal of complex procedures. Earlier in the thesis attention was drawn to the familiarity of the researcher with the context of the study and a rationale was provided for this (Section 1:2). The need to reduce bias and establish the trustworthiness of the findings was emphasised and the procedures involved in this will now be described. The chapter concludes with the ethical imperatives of the study.

However, before the individual elements of grounded theory methods are described an overview of the research process will be provided. The purpose of this is to indicate what actually happened during the study period (1996 - 2000). Thus integrating research methods and activity associated with establishing the trustworthiness of the data. Figure 4:1 therefore represents a timeline giving the sequence of the research processes involved in this study.

Figure 4:1 The sequence of data collection and analysis



4:1 Grounded Theory Methodology

A synopsis of the process of grounded theory methodology will now be presented with the purpose of establishing grounded theory within the constructivist paradigm and to delineate the key attributes which should be transparent within the current study. Grounded theory utilises a set of procedures which systematically develop inductive theory about a particular phenomenon. The purpose of these processes is to build theory which is faithful to the data collected and illuminates the focus of the study (Strauss and Corbin, 1990). It is based on the following premises, which are congruent with the constructivist paradigm:

- theory is subject to temporal and spatial alteration
- the nature of experience is continually evolving
- people are active in shaping the world they live in
- the emphasis is on change and process, and the variability and complexity of life
- it is necessary to discover the interrelationships among conditions, meaning and action.

Grounded theory methodology is predominantly characterised by its specific purpose which is to develop substantive or formal theory. The delineation of these, and the intent of the current study, has been described in the previous chapter (Section 3:4). Grounded theory has four basic tenets which isolate it from other qualitative methods. These are theoretical sensitivity, theoretical saturation, theoretical sampling and constant comparative analysis.

Theoretical sensitivity refers to personal qualities within the researcher and demonstrates an ability to recognise what is important in the data and give it expression (Glaser, 1978). It aided the formulation of substantive theory which was faithful to the reality of the phenomenon under study, by developing a mind which was sensitive to nuances within the data. This sensitivity was developed through questioning the data and continually challenging early conceptualisations of the theory. It was also evident in the first two chapters of this thesis where the major areas of debate surrounding the phenomenon of advanced nursing practice were discussed in terms of title, focus of practice, level of education, current research and theoretical development. The serial development and administration of interview

schedules which were sensitive to the developing theory (Section 4:3 and Appendices 3 and 4); the process of constant comparative analysis (Section 4:7 and Chapter 5) and attempts to establish the trustworthiness of the data (Section 4:6) also demonstrated the presence of theoretical sensitivity.

Theoretical sampling occurred during the process of analysis. Data was analysed and appropriate sample groups were chosen to explore and challenge assumptions demonstrated within the data. This was evident within this research study as the sampling procedures (Section 4:4) and the derivation of the interview schedules (Section 4:3). The process was used to promote an integrated theory (Chapter 5). Data collection itself was controlled by the emerging theory (Strauss and Corbin, 1990).

Constant Comparative Analysis describes the process of analysis. Within this process several stages of coding occurred. These were open, axial and selective. Each stage derived specific aspects of the developing theory. In open coding the aim was to derive concepts, which were then grouped together to form categories (Appendix 14 - Figure A; Ball, 1999). The properties and dimensional range of individual categories were also identified at that stage. In axial coding varying conditions which impacted upon the phenomenon were utilised to form the paradigm model (Figure 5:1). Finally selective coding delineated the core category, central to the developing theory. The way in which the coding strategies have been related here implies a linear progression whereas, in fact, movement was continuous between each stage until theoretical saturation had been reached. Throughout the stages of data collection and analysis categories, properties and conditions were continually compared and contrasted with one another to achieve density and integration.

Finally theoretical saturation was aimed for. Data were collected and analysed to the point where no new categories, properties or conditions were emerging. This has also been termed "*thick description*" by Denzin (1998b:324) and should aid the transferability of the findings. The criteria used for determining saturation between the researcher, co-analyst and a key participant were:

- the theory had achieved sufficient density and was well integrated
- theoretical sensitivity to the data had been demonstrated
- the empirical limits of the data had been reached
- categories had been represented under diverse conditions

The basic tenets of grounded theory have only been described in brief at this stage, they will continue to be expanded and referred to throughout this chapter. Specific terminology is used in grounded theory and a glossary, including these and other terms used within the thesis, may be found in Appendix 8.

4:2 The Changing Context of the Study

The context of the study has already been alluded to in Chapter 1 (Section 1:2). The changing milieu of adult critical care, in the UK, over the study period will now be described. The contribution made by the current study to national policy will also be made evident. At the beginning of the study in 1996, data were to have been collected only within the Intensive Care Unit (ICU). The definition provided by the Department of Health for the UK (1996) was identified:

“a service for patients with potentially recoverable conditions who can benefit from more detailed observation and invasive treatment than can safely be provided in general wards or high dependency”.

(Department of Health 1996:6)

However it became apparent, as data collection proceeded, that many advanced practice nurses, although based in the intensive care unit, were in fact peripatetic. Activity was concentrated on patients who demonstrated, or who were likely to demonstrate, deterioration due to the severity of their illness. Therefore, the definition provided by the Audit Commission (1999) was utilised in the remaining years of the study as it concentrated on the critical care needs of adult patients rather than a specific geographical location, nor was it dependent upon a particular intervention.

"Adult critical care includes both: intensive care - the highest level of care which patients need when two or more of the body's life processes fail; and high dependency care: an intermediate level for, for example, patients who no longer need intensive care ... or are recovering from major surgery ..."

(Audit Commission 1999:11)

At the completion of the thesis a new definition of adult critical care was established, which the emerging findings of this research influenced. The researcher was part of a working party charged, by the Chief Nurse for England and Wales, with the Review of Adult Critical Care Nursing' which sat from July 1999 to May 2000 (Review of Adult Critical Care Nursing, 2000). This report is now available on the NHS Executive (NHSE) website (www.doh.gov.uk/nhsexec/compcritcare.htm). The research portrayed in this thesis made a considerable contribution to the national expert group whose report (NHSE, 2000), to the Secretary of State for Health, England and Wales, established that critical care should not be an isolated geographical area within a hospital but rather should reflect patient need and dependency. This together with the corresponding strategic conditions of continuity, improving patient care and restoring were key features of the substantive theory which emerged from this research study (Chapter 5).

"Comprehensive critical care should be delivered locally to a consistent vision and standards ... It aims to meet the needs of all patients who are critically ill including those with specialist needs rather than just of those who make it into the beds currently designated as either intensive care or high dependency care ... We recommend that the existing division into high dependency and intensive care beds be replaced by a classification that focuses on the level of care that individual patients need, regardless of location."

NHSE (2000:9)

The results of this study have also contributed to the development of critical care nurse consultants, whose prime responsibility will be to establish nurse led outreach teams. The purpose of these will be to maintain continuity and consistency of care, prevent deterioration and improve patient outcome. This contribution will be addressed in greater depth in the concluding chapter.

4:3 Data Collection

Data were collected in the USA, the UK, Australia, New Zealand and Canada. This was necessary due to the paucity of data available, in the context of adult critical care, in the UK during the study period (Section 1:3). These countries were also chosen because they were experiencing the same seismic changes in the delivery of health care described earlier (Section 1:1). Data were collected in such a manner that the tenets of theoretical sampling were adhered to (Section 4:4).

The five major data collection tools utilised in this study were formal and informal interviews, participant and non participant observation and contextual fieldnotes. Interviews were used to gain the perspective of the individuals involved in advanced nursing practice in adult critical care. As a form of data collection, interviews can be criticised because they tend to generate retrospective accounts of events and idealised presentations of self. The inclusion of observation techniques and triangulation of the data challenged this potential bias and enabled comparison between visual and oral data.

Two interview formats were utilised; formal and informal. The formal interview (Chenitz and Swanson, 1986) began with a structured set of themes to be considered by the participant (Appendix 2). These were derived from the major tenets of symbolic and interpretive interactionism (Appendix 6). For example the notion of career in the development of self resulted in Questions 1 - 9 of the first interview schedule. The rationale for this emphasis was the manner in which participants negotiated their role both with self and others. Questions 3 and 4 (Appendix 2) also attempted to explore the potential impact of power, gender or culture inherent within the theory of interpretive interactionism. The impact of the circumstances upon people's lives was addressed initially by Question 10, although this was somewhat limited because only the issue of knowledge was pursued. Individual construction of the role was addressed through Questions 11 and 12. Finally, the consequences of human interaction were addressed by Question 13.

As the process of constant comparative analysis progressed the interviews became less structured but increasingly focused on concepts arising from the process of constant comparative analysis (Appendices 3 and 4). From open coding analysis, it was evident there were three main elements associated with the advanced nursing

practice role in adult critical care. These were: impact on patient stay and outcome, following the patient through a period of critical illness (Questions 1 and 2), termination of that relationship (Question 3) and the impact of the peer group and interdisciplinary team (Questions 4 - 6). The second interview schedule sought to reflect these elements (Appendix 3).

The final interview schedule was relatively unstructured requesting participants to reflect on personal characteristics and particular situations which epitomised the advanced nature of the role (Appendix 4). The rationale for this lay in an attempt to extrapolate the essence of advanced nursing practice which added density to the emerging conditions. It also aided the development of the core category without placing the constraints of a structured interview upon individual participants. It can be seen how the interview schedules became less and less controlling, as the study progressed reflecting emerging issues, participant involvement and researcher confidence (Appendices 2, 3, 4).

Informal interviews also occurred in conjunction with participant and non participant observation (see below). The informal interview utilised conversations to identify the participant's interpretation of events, and to validate and question previous findings derived through the process of continuous comparative analysis. Participant observation was used to clarify data collected during formal interviews and to challenge propositions associated with the emerging theory. A total of one hundred and fifteen hours were spent in participant and non participant observation of one participant in the UK (Participant 30). This included clinical practice in the direct care of the critically ill and the formation of policy at a local and national level. The formation of policy at the local level comprised attendance at various meetings convened to set standards of care, discuss the introduction of various initiatives e.g. clinical supervision and curriculum development. Contribution at a national level involved the development of a report to the Chief Nurse at the Department of Health (England and Wales) concerning the nursing contribution to the future provision of adult critical care services, alluded to in the previous section (NHSE, 2000; Review of Adult Critical Care Nursing, 2000).

Participant and non participant observation were used to observe behaviour at both a symbolic and a behavioural level, having at its focus the interaction of the people observed. This allowed depth and focus on the phenomenon of advanced nursing

practice in adult critical care, whilst the interviews supplied a breadth of data. The reason more participant or non participant observation was not undertaken was the shortage of time available to collect data and gain ethical approval in different countries on a small budget with limited study leave.

Observation techniques allowed the exploration of real-life situations occurring in a naturalistic setting (Burgess, 1982). They were intrinsic to both the constructivist paradigm, symbolic and interpretive interactionism. It allowed direct observation in the field excluding artificiality which is all too rare with other techniques (Robson, 1993). Parahoo (1997) considered observation to be perhaps the most important method of data collection in professions, like nursing, which are practice-based. The researcher was known to the participant involved in this series of data collection. Both participant and non participant observation took place. That is to say the researcher became directly involved in nursing practice with the participant for a period of time and then moved to an observer role when patient care or management issues were being discussed. This allowed discussion to take place concerning certain decisions the participant was making and was invaluable to the researcher providing real life representation of the thought processes, decision making and values inherent to advanced nursing practice in adult critical care. The researcher was also reasonably well known on the intensive care unit where observation techniques were used. Homan (1991) has suggested that a covert researcher produces an unreal effect within the real life situation. However, the nurses on the ICU soon appeared to get used to the researcher's presence. This was evident in the way they discussed issues related to patient care with the researcher and requested researcher participation in various patient related tasks. At the local policy level participant observation was utilised in order to encourage a free flow of discussion concerning local issues. At a national level the researcher was also a member of the working party reporting to the Chief Nurse and therefore participant observation could be undertaken (Review of Adult Critical Care Nursing, 2000).

A strict framework was not used to collect data. Instead, prior to entering the ICU and participating in various meetings, a mental note was made of the issues arising from the process of data analysis and these were pursued and challenged during the data collection period. To reflect the theoretical underpinning of grounded theory, data collected focused on actions and interactions of the participant by observing:

- the people involved and who they were
- what was involved
- the purpose of the interaction/action
- the form the interaction was taking and what people were thinking, doing, saying

It was also important to consider what conditions were in play. These could be contextual, intervening or consequential conditions. Data collection periods usually lasted for approximately five hours, followed by informal interviews with the participant, where observations made during the data collection period were analysed and challenged. Jorgenson (1989) suggests that participation and observation are both competing and conflicting for the researcher. However, this conflict was not experienced personally. This may have been because the environment was familiar and the ready acceptance of the researcher by both the participant, members of the interdisciplinary team and various working parties. Conversely, it may be seen that immersion within the context of the study in this manner could lead to an inability to distinguish between practice and research (Hammersley and Atkinson, 1983). This occurrence was also not experienced during data collection. Again, a reason for this may be the researcher's long tenure in the field of intensive care nursing. It was easy to distinguish 'customary' nursing practice (Section 1:2) and that which was represented by the participant. These findings will be portrayed in the Results Chapter.

Field notes were made with the aim of enhancing the trustworthiness of the study (Section 4:6). In order to meet the exigencies of credibility and auditability four forms of documentation were taken. These were contextual, methodological, analytical and personal reflection. Contextual fieldnotes referred to the context in which data was collected and the pertinence of this to the developing theory. Methodological and analytical fieldnotes referred to coding and theoretical memos made during open, axial and selective coding. Personal reflection on the research process aided the development of the theory. A diary recording events was kept, to identify key activities and achievements associated with the study. These forms of documentation and their role in the analysis of data were intrinsic to the development of the audit trail, the purpose of which will be discussed later in this chapter. The use of five forms of data collection increased the scope of the study. As a form of triangulation it also significantly increased the credibility of the study (Denzin, 1989b).

The process of data collection followed is outlined below: The two way arrows represent the interplay between the processes of data collection and analysis.

Formal Interviews (General Themes)

↑↓

Constant Comparative Analysis

↑↓

Formal Interviews (Increasingly Focused)

↑↓

Constant Comparative Analysis

↑↓

Participant and Non Participant Observation

↑↓

Informal Interviews

↑↓

Field Notes

4.4 Deriving the Sample Group

Theoretical sampling required that the developing theory guided selection of the sample. Examples of this included:

- increasing the scope of the study to encompass participants who worked outside the geographical confines of intensive care units, but who were still involved with the care of those who may become critically ill or who were recovering from critical illness. This occurred when it became apparent, within the data, that critical illness needed to be viewed as a continuum rather than a geographical location (Logic Diagram 1, Section 5:4:1).
- noting the reduced sense of autonomy apparent in one participant who did not hold a higher degree. The scope of the study was increased to include more participants who did not hold, or were not working towards, a higher degree to ascertain if this was a characteristic of the individual participant or one which was shared.

To ensure the sample was representative and the characteristics of advanced nursing practice enumerated, sampling criteria were identified which were supported by the literature (Jacobs, 1998; Manley, 1997; Hamric et al, 1996; Hickey et al, 1996; Gawlinski and Kern, 1994; Mezey and McGivern, 1993; Snyder and Mirr, 1995). These were:

- educated, or in the process of being educated, at Masters level
- role function is based in clinical practice, rather than policy development or management
- in possession of an advanced practice title - nurse practitioner, clinical nurse specialist or clinical nurse consultant
- employed in the care of actual or potential critically ill patients

All those approached to participate in the study consented to be interviewed and one participant also agreed to participant and non participant observation. Nobody declined to participate in the study.

During the administration of the second interview schedule (Appendix 3) these criteria were altered slightly due to issues relating to education and employment in Australia and New Zealand. It had been assumed because Australia had moved to higher education at an earlier stage than the UK that clinical nurse consultants would have had ready access to postgraduate education in nursing (Section 2:1). However this proved not to be the case, at the time of data collection. Clinical nurse consultants were not required to hold a Masters degree as a condition of employment (Cotton, 1997), nor had postgraduate courses in nursing been widely available. Also, due to an alteration in salary scales clinical nurse consultants were beginning to take on managerial functions and titles, observable in the demographic details outlined in Table 2 - Participant 21. It was decided to continue data collection including these individuals to ascertain if differences were apparent in the interpretation and performance of the role. In total 17% (n=6) of the sample group had not experienced postgraduate education and 13% (n=5) were currently in the process of attainment. A total of 70% (n=28) of the sample group held postgraduate degrees.

Facilitators were identified to help with data collection in the USA and Australia. To maintain confidentiality they will not be named here, however their contribution was instrumental in accessing appropriate participants. All facilitators were associated with adult critical care and the provision of postgraduate education. - Data collection in New Zealand was aided by a former student who had worked with advanced practice nurses in Auckland and was keen data should be collected from nurses he deemed to be excellent exponents of the role.

Sample criteria, indicated above, were sent to the facilitators of the study in the USA. Participants were identified, clinical nurse specialists and nurse practitioners, and randomly selected. At the beginning of data collection it was hoped that all participants would be actively employed in an adult critical care area. However, it became clear that many of the nurses engaged in advanced practice moved across the usual historical boundaries of Unit, Ward or Hospital/Community. Later data collection, during the administration of the second and third interview schedules demonstrated this was a major criteria for effectiveness in the role and became integral to the developing model of advanced nursing practice in adult critical care (Logic Diagram 1; Logic Diagram A - Appendix 15; Section 5:4:3).

In Australia, data was collected in New South Wales, Victoria and South Australia. It had been hoped that contact would be made with nurse practitioners in Australia, at the 6th International Nurse Practitioners Conference (Appendix 11 - February 1998), but nurse practitioner roles were then only the subject of a pilot study in New South Wales, so it was not possible to recruit. The sample in Australia and New Zealand comprised clinical nurse consultants and a trauma nurse co-ordinator. In the UK, two participants were identified using the database from a Department of Health funded project: Preparing the Nurse Practitioner for the 21st Century: realising specialist and advanced nursing practice (Roberts-Davis et al, 1998). From this database four participants were identified as appropriate to the study, but only two of these held higher degrees. By this stage a difference in the performance of the role had been identified between those holding Bachelor and Masters degrees (Section 5:4:1). The two remaining participants in the UK were known to the researcher. Only individuals holding higher degrees were included in the remaining sample (Table 2).

Following presentation of the study's preliminary findings at the International Council of Nurses conference in June 1999 an invitation was extended to attend the Canadian Adult Critical Care Nurses Conference (September 1999). This was undertaken, however, only two appropriate participants were identified. Canada, at the time of data collection, had experienced the same turbulence in health care provision described in the introduction to the thesis and which was shared by all participating countries. This had resulted in a significant reduction in the number of clinical nurse specialists in adult critical care areas. The role and education of the nurse practitioner in Canada had not, at the time of data collection, been established in adult critical care. However, in those provinces with a common border with the USA nurse practitioners were being educated in the USA and then practising in Canada (e.g. Participant 39).

The sample is dominated by an Anglo Saxon cultural perspective. The scope of the study would have been increased if cultural diversity had been demonstrated. However, at the current time advanced practice nurses are not employed in the care of the critically ill within the countries of the European Union or in those of Eastern Europe. The development of critical care services are also not a priority in Asia and Africa who rightly concentrate on developments in primary care.

Table 2 represents the chief characteristics of the participants who contributed to the study. The number allocated to each participant will be used to indicate the source of verbatim text portrayed in the Results Chapter.

Table 2: Sample Characteristics (Key ACNP = Acute Care Nurse Practitioner; CCNP = Critical Care Nurse Practitioner (adult); CNS = Clinical Nurse Specialist; CNC = Clinical Nurse Consultant; ICU = Intensive Care Unit; CNM = Clinical Nurse Manager; MSN = Master of Nursing; MScN = Master of Science in Nursing; MEd = Master of Education; BScN = Bachelor of Science in Nursing; BN = Bachelor of Nursing.

Informant - Number and Title - Country of Origin	Area of Nursing Practice	Length of Time in Speciality Practice	Years in Advanced Practice Role	Graduate Status	Gender
1 ACNP	Cardiology	>5 years	> 2 years	MSN (ACNP programme)	Male
2 CNS	Cardiac Surgical ICU	> 5 years	> 5 years	MSN	Female
3 CNS	Transplant ICU	> 5 years	> 5 years	MSN	Female
4 CNS	Surgical Services (includes ICU and step down services)	> 5 years	> 5 years	MSN	Female
5 CNS	Neuro - science	> 5 years	> 5 years	MSN	Female
6 CNS	Cardio - thoracic Surgery	> 5 years	> 2 years	MSN	Female
7 CNS	Transplant ICU	> 5 years	> 5 years	MSN	Female
8 CNS	Cardiac Surgery ICU	> 5 years	> 5 years	MSN	Female
9 CNS	Respiratory ICU	> 5 years	> 5 years	MSN (studying for doctorate)	Female
10 CNS and ACNP	Coronary Care Unit	> 5 years	> 5 years	MSN Clinical Nurse Specialist and MSN ACNP (studying for doctorate)	Female
11 Data lost					
12 CNC	Emergency Dept.	> 5 years	> 5 years	MSc in Public Health	Male
13 CNC/NP	Emergency Dept.	> 5 years	> 5 years	MSc Nursing	Female
14 CNC	ICU	> 5 years	> 4 years	MSc in Health Personnel Education	Female

15 CNC	ICU	> 5 years	> 6 months	BSc Nursing	Female
16 CNC	Cardiology	> 5 years	> 4 years	BSc Behavioural Sciences	Female
17 CNC	ICU	> 5 years	> 5 years	BSc Applied Science	Female
18 CNC	Cardiology	> 5 years	> 2 years	MSc Nursing	Female
19 CNC	ICU	> 5 years	> 4.5 years	Graduate Diploma in Adult Critical Care (undertaking MSc in Nursing)	Female
20 CNC	ICU	> 5 years	> 5 years	Bachelor in Nursing (undertaking MSc in Nursing)	Female
21 CNM (CNC until 3 years ago - role changed due to hospital policy)	Cardiac Surgery ICU	> 5 years	3 years as CNM 2 years as CNC	Bachelor in Nursing	Female
22 CNC	Cardiology	> 5 years	> 5 months	MEd (currently studying for PhD)	Female
23 CNC	Cardiac Services	> 5 years	> 2 years	BSc Nursing (undertaking MSc Health Management)	Female
24 CNC	Neuro - sciences	> 5 years	> 4.5 years	MSc in Nursing	Female
25 CNC	Cardiac Services	> 5 years	> 4 years	BSc Health Sciences	Female
26 CNC	ICU	> 5 years	> 2 years	BSc Health Sciences	Male
27 CNC	Emergency and Trauma	> 5 years	> 5 years	MEd	Female
28 CNC	ICU	> 5 years	> 5 years	Dip in Adult Education (undertaking MSc Health Sciences - Nursing)	Female

29 Trauma Nurse Co-ordinator	Trauma	> 5 years	> 5 years	Bachelor in Nursing (undertaking MSc Health Sciences Nursing)	Female
30 CNS	ICU	> 5 years	> 5 years	MSc Nursing	Female
31 CNS	ICU	> 5 years	> 5 years	MSc Health Care Policy and Organisation	Female
32 CNS	ICU	> 5 years	> 9 months	MSc in Nursing	Female
33 CNS	ICU	> 5 years	> 5 years	MSc in Medical Anthropology Cancer Care and Advanced Practice	Female
34 ACNP	Trauma and Surgical Adult Critical Care	> 5 years	19 months	MSN(ACNP programme)	Female
35 ACNP	CCU	> 5 years	> 3 years	MSN (ACNP programme)	Female
36 ACNP	Cardiology	>5 years	> 4 years	MSN (ACNP programme)	Female
37 ACNP	Cardio - thoracic	> 5 years	> 4 years	MSN (CCNP programme)	Female
38 ACNP	Transplant Services	> 5 years	> 3 years	MSN (ACNP programme)	Female
39 CCNP	Cardiology	> 5 years	> 3.5 years	MSN (CCNP programme)	Female
40 CNS	Intensive Care	> 5 years	> 4 years	MScN	Female

In the USA, advanced nursing practice is an umbrella term which delineates four areas of practice, the nurse practitioner, the clinical nurse specialist, the nurse anaesthetist and the nurse midwife. All are now masters prepared. Only the first two were included in the study as the remaining examples either do not exist in the UK or exist as a separate discipline. The role of the clinical nurse specialist developed in critical and acute care areas, within hospitals. As the title suggests practice was within speciality areas, such as Intensive Care. Main responsibilities included ensuring staff competence met patient need and practice development, as

such they were seen as indirect, rather than direct care givers. The major role competencies focused on building and maintaining a therapeutic team, providing emotional and situational support, making the bureaucracy responsive to patient and family need and monitoring the quality of health care policy (Fenton, 1985). It was also usual for the role to be divided into four distinct sub-roles, those of expert practitioner, educator consultant and researcher (Scherer et al, 1994; Hamric and Spross, 1989). The same criteria also generally applied in the UK and Canada. However, in Australia and New Zealand the clinical nurse specialist title reflects a direct care giver who has been designated as competent in their specialist area of practice (Cotton, 1997), by their employing authority who may, and indeed did, utilise different criteria to estimate competence. The criteria identified above for clinical nurse specialists in the USA, UK and Canada (Fenton, 1985) more readily applied to clinical nurse consultants in Australia (Dawson and Benson, 1997) and New Zealand. Some confusion has arisen in the literature associated with the different delineation of CNS and CNC roles (Chuk 1997) so it was important to clarify the different terms used in the countries where data was collected.

Nurse practitioners were well established in the USA. The role had its origins in primary care and therefore has a more 'generalist' focus than its 'specialist' counterpart identified above. However, the role had become more acute and adult critical care orientated in the last decade. The domains of practice for nurse practitioners have been delineated as follows: direct management of patient health, monitoring and ensuring the quality of health care practices, work role competencies, helping role, teaching coaching function and effective management of rapidly changing situations (Brykczynski, 1985; 1989). Nurse practitioners had not been established in Australia during the data collection period of this study, but pilot sites had been established which reported favourably upon the utility of the role in relation to patient welfare and management (Nurse Practitioner Project Stage 3, 1995). One of the participants in this study (Participant 13) had functioned as a nurse practitioner on one of the pilot sites. The role has now been established in New South Wales. All nurse practitioners in this study worked within the domains of practice outlined above.

Theoretical sampling differed in its purpose as the analysis process progressed. Open sampling related to open coding and aimed to identify potentially relevant categories together with their properties and dimensions. This was achieved in the

administration of the first interview schedule (Appendix 2). Once preliminary categories had been identified relational or variational sampling was utilised to assist axial coding. The second interview schedule was distributed at this stage (Appendix 3) and demonstrates a focus on: impact on patient stay and outcome, following the patient through a period of critical illness, termination of the relationship and professional relationships. The aim of sampling at the axial coding stage was to uncover and validate relationships between various conditions i.e. causal, contextual, action/interactional and consequential, that is to say, sampling was guided by the exigencies of the developing paradigm model (Figures 5:1 to 5:4).

Selective coding required discriminate sampling. At this stage sampling became more focused, but the third interview schedule (Appendix 4) became less controlling, as specific categories and conditions emerged from the data. In this, participants and sites were chosen to maximise opportunities for verifying the core category and transactional system. Use of the international Advanced Practice Listserve (University of Pennsylvania) and electronic mail were used to maximise discriminate sampling. Table 3 presents a summary of participants exposure to different research instruments and sampling techniques. Table 4 indicates the different countries where participants practised.

Table 3: Sequential sampling and exposure to different data collection tools

Participants	Data Collection Tools	Sampling Techniques
1 - 11	1st Interview Schedule Appendix 2 Fieldnotes	Open Sampling
12 - 30	2nd Interview Schedule Appendix 3 Fieldnotes	Relational or Variational Sampling
30 - 40	3rd Interview Schedule Appendix 4 Fieldnotes	Discriminate Sampling
30	Participant and Non Participant Observation 1st, 2nd and 3rd Interview Schedules Review of the Paradigm Model Fieldnotes	Relational or Variational Sampling, and Discriminate Sampling

Table 4: Participants by Country

Participants	Country
1 - 10, 34, 35, 36, 37, 38	USA
12 - 27	Australia
28 - 29	New Zealand
30 - 33	UK
39 - 40	Canada

Participants made constant reference to 'patients' as the receivers of care during the process of data collection. In postmodernist terms this might infer a power relationship where people are seen as objects rather than individuals (Porter, 1996a). The relationship between advanced practice nurses and 'patients' proved to be one which sought to work with individuals and their needs in an attempt to promote health and provide support, rather than one which objectified people. The term 'patient' will continue to be used throughout the thesis to promote clarity in delineating receivers of care however, as indicated in Chapter 2, no value judgement is intended by it's use.

4:5 Tools Used for Data Collection

A micro-cassette recorder was used in the first tranche of data collection. This was chosen to reduce the size and weight of instruments whilst travelling. However, audibility was a problem during transcription due to the amount of background noise. Therefore, for the remaining interviews a full size cassette recorder was used. This produced a number of benefits. In the first instance audibility was improved considerably. It also allowed participants to be less aware of the process of taping the interview because it did not need to be hand held. After a while many participants revealed they 'just forgot all about it'. Finally, it enabled ease of playback on a 'walkman' thus assisting immersion in the data. A file was created within which the different forms of fieldnotes identified earlier were kept. This was at the suggestion of the co-analyst and prevented a loss of data. Unfortunately, this was not commenced prior to the first set of interviews which led to a loss of data for participant 11. The microcassette used at the interview was also inaudible due to the noise from a ventilation shaft. Therefore, there is no data available from participant 11 for analysis or reflection.

Grounded theory within a constructivist paradigm entailed a literal construction of theory which was co-created between the researcher and participants (Eisner, 1992; Guba and Lincoln, 1989). Therefore the self of the researcher "*permeates all methodological decisions and penetrates the very fabric of the meaning constructed*" (Greene, 1998: 390) who in the process becomes a self acknowledged tool of the research study. The detachment of the self was not a regulatory ideal (Greene, 1998). However, neither must any bias of the researcher go without challenge because the final product of the research should be a creation of the researcher and the participants. Therefore, the process of challenge must be evident and adequate representation of the perspective of the participants should be apparent. The process of challenge in this research study included the use of a co-analyst and a key participant to challenge and review the development of the theory as it emerged (member validation). Finally, key participants were invited to comment on a publication of preliminary findings (Appendices 7 and 9).

4:6 Trustworthiness

Trustworthiness is the term used to ascribe rigour to a qualitative research process. Lincoln and Guba (1985), suggested four criteria. These were credibility, transferability, dependability and confirmability. For the purposes of this research dependability and confirmability were combined under the umbrella of auditability. The reason for this was that the two separate terms described strategies by which the process of analysis may be made more transparent and these were more commonly referred to as auditability (Sandelowski, 1986).

This concern with rigour has been criticised by Sandelowski (1993:1) as inducing "*rigor mortis*" in an attempt to establish the "*truth value*" of qualitative research, usually associated with the positivist tradition. Criteria for judging qualitative research were the subject of much debate in the literature. Heshusius (1990), for example, stated the need for criteria was groundless as one was instinctively aware if a piece of research was good. Dependence upon criteria was seen as regression. However, it was accepted that various bodies, such as ethics committees, required criteria to make certain judgements (Emden and Sandelowski, 1999). This research would also be subject to similar scrutiny and therefore the above criteria have been

utilised to demonstrate the attempts made to reduce bias and establish the feasibility of the study's findings.

To achieve credibility several techniques were employed. The term 'credibility' referred to the measures taken which increased the probability that credible findings were produced. This consisted of prolonged engagement, persistent observation and triangulation. Prolonged engagement involved the investment of sufficient time to achieve knowledge of the culture and building trust with participants. 'Sufficient time' to achieve this is usually measured by an ability to survive in the culture without being challenged. This of course was not possible whilst gathering data abroad, due to the limited time available for data collection, but in the UK time was allocated for this to be achieved. In the ICU chosen for participant and non participant observation the researcher was already known to the staff members through her current post, publication and public speaking record; therefore acceptance was noticeable very quickly. Prolonged engagement was also made evident through personal and contextual field notes. Field notes addressed the researcher/participant relationship, the effect of the researcher's presence and actions, interactions and subjective states of the researcher and the participant. Trust was developed through ensuring participants were aware of the measures taken to achieve confidentiality (Appendix 1). Anonymity was guaranteed and the interests of the participants were respected.

Prolonged engagement, especially to the lone researcher, can lead to immersion within the culture to such an extent that situations of pertinence and relevance are missed (Guba and Lincoln, 1985), and bias is increased. To avoid this several measures were taken, these were transcript review, co-analysis and member validation. All participants were given their transcript for review and amendment to ensure accurate representation. Co-analysis and debriefing took place throughout the process of constant comparative analysis. In the first instance the co-analyst, an expert in the grounded theory method, reviewed a sample of transcripts independently and the derivation of categories was discussed. At each step of the coding process the co-analyst also commented upon and challenged the emerging paradigm model and core category. Criteria utilised to challenge the process of analysis were:

- was there agreement that the marked text was relevant and appropriate ?
- were the codes and categories appropriate ?
- was the emerging theory a logical extension of the categories and properties identified?
- did the memos demonstrate an appropriate questioning of the data ?
- did categories contain appropriate concepts ?
- had appropriate relationships been established between categories and dimensions?
- was the core category integrated comprehensively ?
- has the conditional matrix been derived appropriately?

Member validation involved two phases. Firstly, key participants (Appendix 7) were invited to comment on published preliminary findings (Ball, 1999; Appendix 9) which portrayed open coding (Appendix 14). The second phase of member validation involved discussion with participant 30 and related to the developing paradigm model and issues pertaining to personal experience of an advanced nursing practice role. A further perspective taken in determining credibility is "*referential adequacy*" (Lincoln and Guba, 1985:313). This required continuous reflection upon raw data and was evident in the methodological and coding memos written during the process of constant comparative analysis. The Logic Diagrams presented in Appendix 15 also represented reflection upon the data and theoretical development.

Persistent observation added "*the dimension of salience*" (Lincoln and Guba, 1985: 304). This required the identification of elements within the contextual situation which were most relevant to the purpose of the research. This was achieved through participant and non participant observation and contextual fieldnotes. Premature closure is a risk in grounded theory, that is to say the researcher ceases to find anything 'new' in the data collected and establishes theoretical saturation. In the current study, this was avoided through co-analysis, member validation, debriefing sessions and the identification of negative cases. Negative cases are examples within the data which do not aid representation of the phenomenon being explored. Triangulation (within-method) was also demonstrated through the use of five forms of data collection, formal/informal interviews and participant/non participant observation and the integration of contextual fieldnotes. Various presentations were also made, at national and international conferences (Appendix 11) and within the City University PhD student seminar group. In the early days these related to the issues raised in

Chapter 2. As the research progressed, the focus changed to the presentation of the developing theory. This allowed debate to occur and the findings to be challenged.

Transferability was the second criteria established in relation to trustworthiness. The transferability of the theory to other contexts needs to be considered. The requirement is that a judgement be made about the utility of the theory, but this does not mean that the theory can be transferred only that it is judged to be possible. This will be addressed in the concluding chapter of the thesis.

The final consideration was auditability and required the generation of an audit (Rodgers and Cowles, 1993; Lincoln and Guba, 1985) or decision making (Miles and Huberman, 1984) trail. The prime reason for constructing an audit trail was to address one of the major criticisms of research performed in the constructivist paradigm which is that the emerging theory is not presented with supportive data (Halpern, 1985). Instead, the theory appears to have emerged utilising a number of conceptual leaps and it is difficult to establish if the theory generated is credible or otherwise. The audit trail in this study (Appendix 10) was constructed through identification of the findings to be defended and the process through which these were derived. It involved the integration of verbatim text, fieldnotes, figures and logic diagrams.

4:7 The Process of Constant Comparative Analysis (CCA)

Analysis followed a definitive pattern (Strauss and Corbin, 1990). It occurred concomitantly with data collection and refined the process of data collection and theoretical sampling. The aim was to reduce raw data (interview transcripts, notes from participant/non participant observation and fieldnotes) into categories which were developed and integrated into a substantive, middle range theory.

As indicated in the previous chapter the method extrapolated by Strauss and Corbin (1990) has been utilised for the process of CCA. The main rationale for this was that Strauss was an originator of the grounded theory approach and the methodology has continued to develop over time unlike that of Glaser (1992, 1998) who might be said to represent the modernist form of grounded theory (Annells 1997b:124). Many

secondary authors render only a partial description of the grounded theory process (Chenitz and Swanson, 1986) and were not considered sufficiently robust in meeting the aims of this research study. To achieve a theoretical explanation of advanced nursing practice in adult critical care three levels of coding were utilised:

- Open
- Axial
- Selective

Together these combined to form a substantive theory. The levels of coding identified indicated a process of analysis which was linear at the beginning. As theoretical sensitivity to the data was enhanced this resulted in movement between the different stages of analysis identified above. For example, in selective coding when the core category was selected consideration of this required further consideration of the subsidiary categories, properties, dimensions and conditions derived during open and axial coding (Appendix 14; Appendix 15; 5:4:1 - 5:4:4). Movement, in both directions, between the coding levels was appropriate and desirable and was also represented by the concept of process which will be described later in this chapter (Section 4:9). The coding levels will now be described in greater depth and the process of grounded theory represented diagrammatically (Figures 4:2, 4:3, 4:4).

Theoretical sensitivity played a major role in the analytic process (Section 4:1). It was attained and retained through asking questions of, and comparing, the data at all levels of analysis, utilising co-analysis procedures and member validation. In making comparisons it was necessary to note the similarities and differences between different types of data. For example a transcript was compared with another transcript and transcripts with fieldnotes or participant/non participant observation notes. Sensitivity to the developing theory was also evident in the different interview schedules (Appendices 2 - 4) and sequential sampling (Table 3).

4:8 The Analytic Process

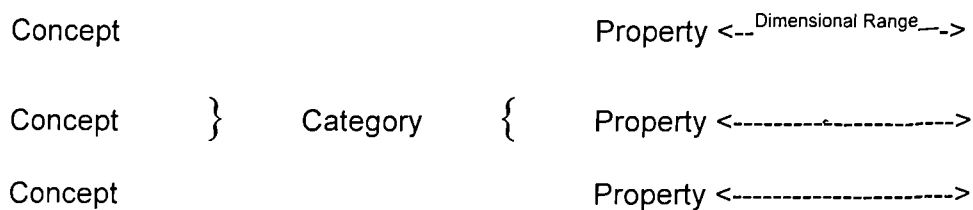
4:8:1 Open Coding

Open coding may be conceptualised as in Figure 4.2. Open coding commenced with the identification of concepts using line by line processing of the transcripts. Relationships were identified between concepts and these formed categories. To do this concepts were compared and contrasted. Each category then formed a cogent entity which provided a key element of the emerging theory. The categories were then further challenged through the identification of properties and dimensions. Each category had a range of properties or what might be described as characteristics or attributes. To illustrate this process an example from the current study is provided (Appendix 14 - Figure A).

In Figure A - Appendix 14 it can be seen that the concepts of the category Enhancing Patient Stay comprised the concepts: improving, continuity, patient education and quality. These were first identified as concepts within the transcripts and grouped together because each was felt to be associated with the amelioration of the trauma of diagnosis and hospitalisation. The properties: satisfaction, enabling, trajectory and autonomy represented the characteristics associated with the category. That is to say, the occurrence of the category could be recognised through increased patient satisfaction, increased independence, a continuous trajectory of care across geographical areas and the willingness of patients to take responsibility for independent action. In contrast the absence of advanced nursing practice in adult critical care might be characterised by decreased patient satisfaction, high levels of patient dependency, fragmented care and an unwillingness to take initiatives in the patient's best interests.

These latter examples form the dimensions of the category which were grouped together to form the dimensional profile of a particular category. These formed the basis of the contextual conditions, developed during axial coding and became the relational propositions in the formation of the core category and transactional system (Sections 4:7:3; 5:5:1; 5:5:2). For representation of the entire open coding process, related to the current study, see Appendix 14. Questions asked of the data during open coding were: who, what, how, when, why. These questions aided the isolation of concepts, the derivation of categories, properties and dimensions.

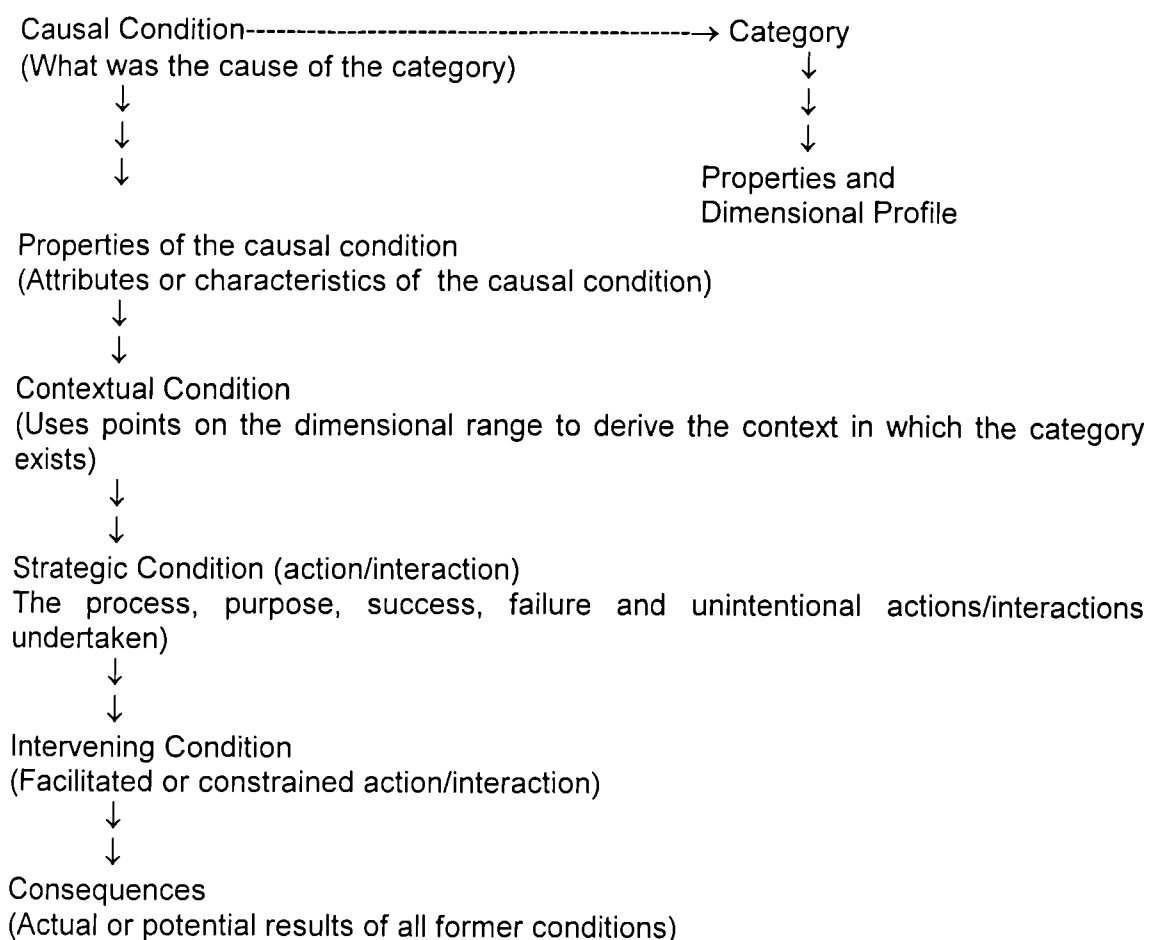
Figure 4:2 - Diagrammatic Representation of Open Coding



4:8:2 Axial Coding

Axial coding (Figure 4:3) continued to develop the categories generated during open coding in terms of causal, contextual, interaction/action strategies, intervening conditions and the consequences demonstrated in the data. Axial coding resulted in the formation of the paradigm model which was a conceptual representation of the phenomenon being explored, which in the case of this study, was advanced nursing practice in adult critical care. The process is outlined in the following diagram:

Figure 4:3 Diagrammatic Representation of Axial Coding



The causal conditions portrayed the cause of the category, why it existed (Figure 5:2; Appendix 15; Section 5:4:1). If the example used in the depiction of open coding (Section 4:7:1) is extended, the causal condition of Enhancing Patient Stay included, Whole Trajectory of Patient Stay and Focus on Outcome (Appendix 15 - Logic Diagram A). That is to say Enhancing Patient Stay was dependent upon a long term perspective of care and an interest in improving the outcome of certain patient populations. The causal condition was also important because it may impact on the remaining conditions. In axial coding the properties or characteristics of the causal condition were also elucidated because they too could impact on the causal condition and inhibit portrayal of the category - Enhancing Patient Stay. The properties necessary to effect the causal conditions outlined above were: an ability to prioritise and identify patient needs over time; taking a broad perspective in relation to patient need; determining criteria through which success might be determined and being accountable (Appendix 15 - Logic Diagram A). It will be noticed that 'autonomy' has become a property of the causal conditions, the reasons for which are explained in Appendix 15 (Point IV).

Contextual conditions were isolated from the properties and dimensions of the categories, identified during open coding. In this study, the contextual conditions were not represented in the formation of the paradigm model, instead they formed the relational propositions supporting the transactional system developed during selective coding (Section 5:5:2).

Action/Interaction strategies, were identified as strategic conditions. In this study the strategic conditions were represented by some of the concepts previously identified during open coding which demonstrated a continuous presence within the data. These included: improving patient care through decreasing trauma, crossing traditional boundaries of environment and practice, influencing patient management, effective communication and networking. Further examples may be found in Logic Diagram A (Appendix 15).

The intervening conditions were those which facilitated or constrained the strategic conditions (Logic Diagrams A and B - Appendix 15). Intervening conditions in terms of this study were represented by those which facilitated Enhancing Patient Stay such as political awareness (Logic Diagram A - Appendix 15) and established values (Logic Diagram B - Appendix 15); and those which constrained activity such as

conflict, gender bias and resistance (Logic Diagrams A and B- Appendix 15). These latter examples began to represent the presence of the macroprocesses of social interaction within the data (interpretive interactionism), whilst other conditions represented the importance of interpersonal social processes (symbolic interactionism). Examples of these were evident in the strategic conditions (Section 5:4:3), particularly those associated with restoring (Logic Diagram 3).

Finally, the consequences portray the outcome of causal, strategic and intervening conditions and represented the culmination of the paradigm model (Figure 5:1). These comprised increased efficiency, collaborative practice, high visibility. They were also related to the properties identified earlier in open coding: patient satisfaction, increased independence, trajectory of continuity, prepared to make transitions and clear understanding.

Questions asked of the data to achieve an axial level of coding were (Strauss and Corbin 1990):

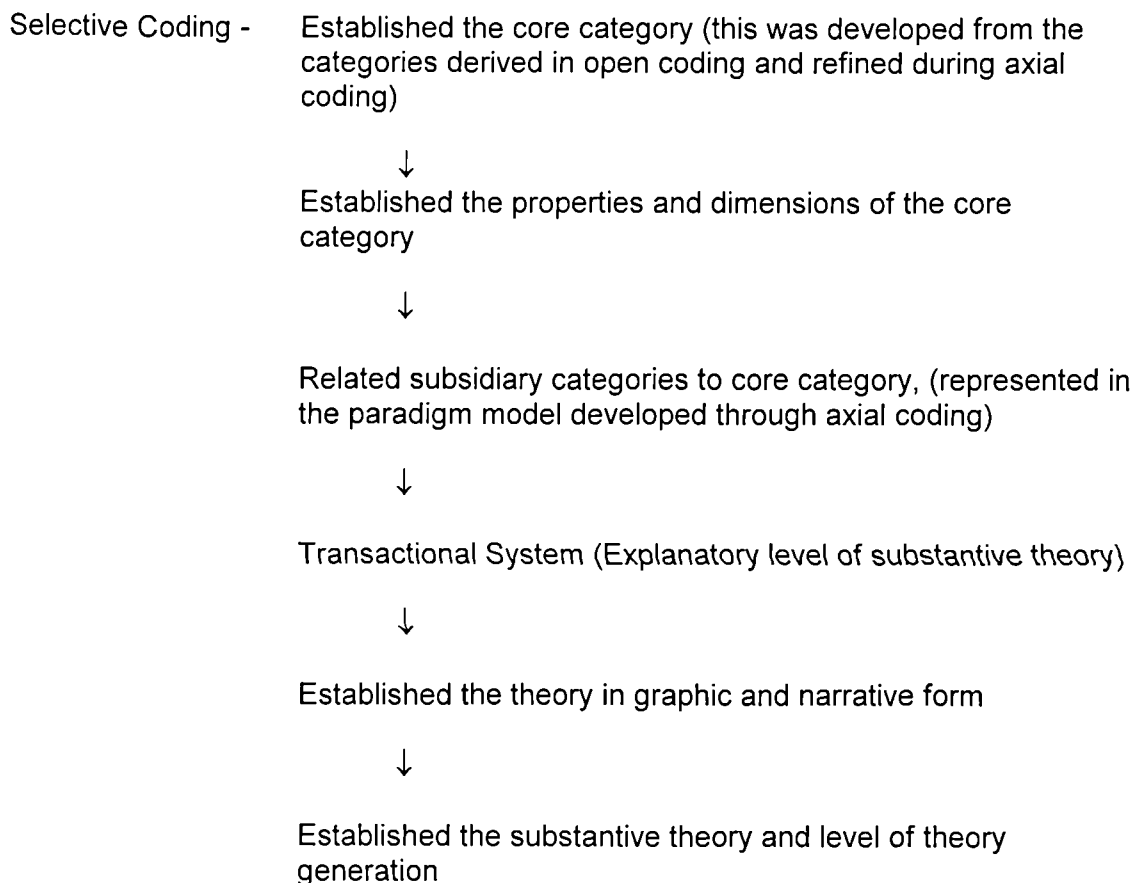
- what is the evidence of this category's relevance?
- if it is relevant, what meaning does it have?
- what are the conditions under which the category occurs?
- is it the same or different in other situations?
- what are the properties of the causal condition?
- what are the action/interaction strategies employed in relation to the derived category?
- what are the intervening conditions which constrain/facilitate action/interaction?
- what are the consequences?

4:8:3 Selective Coding

Selective coding (Figure 4:4) involved the process of selecting the core category. Developing the core category required identification of the main features, or the essence, of the analysis. Categories and conditions, derived in open and axial coding were reviewed to ascertain one which had already identified the essential attributes of the developing theory. In this study, the essence of advanced nursing practice in adult critical care was revealed as: Legitimate Influence (Section 5:5).

The transactional system revealed the interrelationship between the core category, sub-categories and the various conditions derived during open and axial coding (Section 5:5:2). The process of identifying the core category and transactional system were not linear, but as with other stages of the analytical process in grounded theory, were integrated and movement occurred between all stages of analysis. Finally the theory was portrayed in graphic form as the paradigm model (Figure 5:1) and explained through the core category and the transactional system (Sections 5:5:1; 5:5:2).

Figure 4:4 - Diagrammatic Representation of Selective Coding



Questions asked of the data to achieve a selective level of coding were (Strauss and Corbin, 1990):

- what, about this area of study, seems the most striking?
- what is the main problem?

4:9 The Conditional Matrix

A conditional matrix was developed (Section 5:6). This entailed the development of a conditional path, i.e. the tracking of an event, incident, or happening from action/interaction through the various conditional levels. The addition of a conditional matrix to Strauss and Corbin's (1990) representation of grounded theory indicated acknowledgement of the impact of power, culture and gender upon individuals (Corbin and Strauss, 1994; Denzin, 1989a) and represented the theoretical foundation of interpretive interactionism (Anells, 1996:386). By allowing the participants to 'speak' without deconstruction it also represented the substantive theory, emerging from this research, within the constructivist paradigm.

4:10 Process

Process refers to the linking of the contextual conditions derived during axial coding. This was not a set part of the analysis, but demonstrated through the derivation of the transactional system (Section 5:5:2). Process provided a dynamic entity to the analysis explaining why problems occurred; why it was possible for growth and development or why strategies failed to thrive.

4:11 Ethical Considerations

Consideration of the issues raised by Lincoln (1995) in the previous chapter (Section 3:1) helped inform the ethical imperatives of this research. All participants were sentient human beings who were not in any form of power relationship with the researcher. Consent (Appendix 1) was obtained prior to data collection ensuring the study had been explained to the participant's satisfaction and that participation was a decision of free will. If the data collection techniques traversed areas which participants did not wish to recount they were free to withdraw at any time (Appendix 1). Participants were also asked if their employing authority required ethical approval

prior to data collection. A minority of employing authorities did require this, and in every instance data collection was allowed to commence without alteration to the research proposal submitted. Confidentiality was ensured utilising various methods. Taped interviews were confidential and identified by number only and will be destroyed following successful defence of the thesis. Transcripts were also identified by number. All transcripts were kept in the home of the researcher within a locked cupboard. The association of number and participant was known only to the researcher. Participants will be acknowledged, anonymously, in future publications.

Consent was not obtained from patients during the process of participant and non participant observation. This was not possible as the patients who were cared for by the participant were heavily sedated and unconscious. However, relatives were informed of the research activity taking place at the bedside and no protest was made. Indeed, the relatives frequently used the researcher to clarify what was happening to the patient and why. At no time did data collection interfere with patient care or management, nor was confidentiality breached.

4:12 Summary and Conclusions

An overview of the research methods utilised to operationalise the research question and aims of this research have been described. The processes involved in grounded theory methodology were found to be complex and involved. Therefore it is hoped a succinct and lucid account of these has been provided which enables understanding of the results presented in the following chapter.

CHAPTER 5

Results

The Product of Constant Comparative Analysis

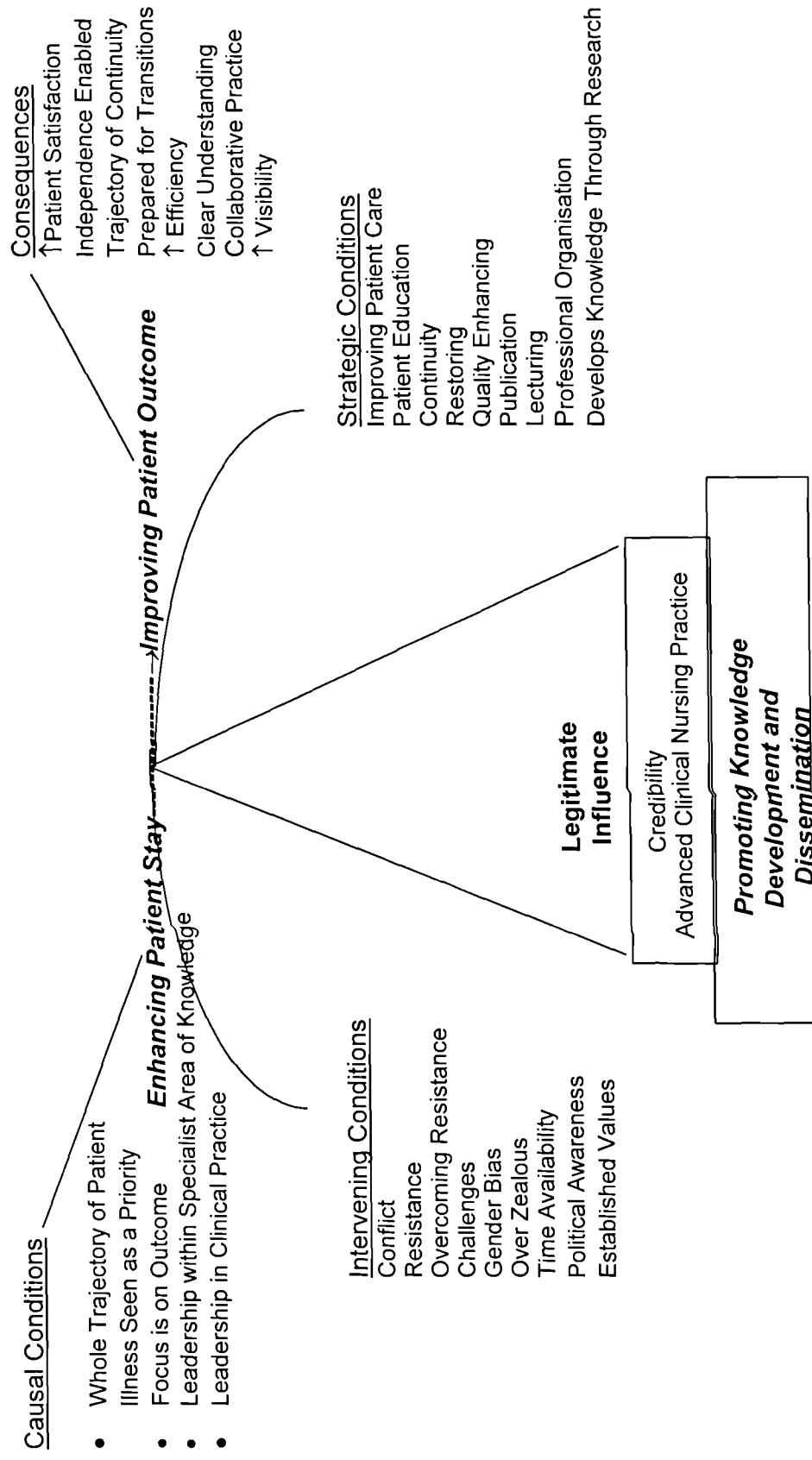
The analytic procedures which comprise constant comparative analysis, described in the preceding chapter, represent a complex process. The portrayal of results, in a logical and cogent manner, is difficult particularly in the transition from open to axial coding where categories begin to collapse and the conditions, which represent the paradigm model, emerge. In an attempt to avoid repetition and tortuous explanation the results of the current study will be depicted in the following manner. The formation of the paradigm model will be presented, combining both the categories derived during open coding and the conditions which arose from axial coding. Following this the core category, the product of selective coding, will be established and discussed in relation to the transactional system and conditional matrix. The key features of the substantive theory will then be summarised and their relevance discussed in the final chapter.

5:1 The Paradigm Model - an Overview

The paradigm model (Figure 5:1) takes the form of a scale or balance, in order to represent the effect various conditions may have on patient stay and outcome. For example, the intervening condition 'Conflict' may diminish Legitimate Influence and reduce the advanced practice nurse's ability to enhance patient stay. It comprised categories resulting from the process of open coding (Appendix 14). These were Enhancing Patient Stay, Improving Patient Outcome, Legitimate Influence and Knowledge Development and Dissemination. With reference to the paradigm model, Enhancing Patient Stay and Improving Patient Outcome represented the focus of Legitimate Influence. Pivotal to the demonstration of advanced nursing practice in adult critical care was an ability to exercise Legitimate Influence. The foundation of Legitimate Influence was 'credibility', 'advanced clinical nursing practice' and Knowledge Development and Dissemination. These eventually comprised the core category and are reviewed in section 5:5:1.

Figure 5:1 - The Paradigm Model

Legitimate Influence - the key to advanced nursing practice in adult critical care



The diagram represents the paradigm model of advanced nursing practice in adult critical care. The association of categories and conditions is also evident.

In terms of advanced nursing practice patient stay was not enhanced or patient outcome improved without Legitimate Influence. However, various factors impacted on the exercise of Legitimate Influence, and these were represented by the intervening and strategic conditions. The intervening conditions represented evidence which constrained or facilitated the ability of the advanced practice nurse to enhance patient stay or improve patient outcome. Whilst the strategic conditions portrayed the means by which this was achieved. The causal conditions represented attributes which needed to be apparent if patient stay was to be enhanced and outcome improved. The consequences of advanced nursing practice related to the exercise of Legitimate Influence and demonstrated objective and subjective criteria for the evaluation of Legitimate Influence.

5.2 Presentation of the Results

In presenting the results of the study verbatim text supporting the analysis was interwoven throughout the analytic process, in order to provide a lucid account consistent with the constructivist paradigm. Verbatim text was identified in italic script. The origin of the verbatim text was identified by a number in brackets. The numbers correspond with the participants listed in Table 2. Therefore, to access the source of a particular item of data refer to Table 2. It was impossible to represent, through the use of verbatim text, all the participants who contributed to the development of the theory representing advanced nursing practice in adult critical care. Therefore, grids were constructed to demonstrate the contribution made by participants to the formation of the paradigm model (Appendix 13). The purpose of the grids was to represent the distribution of response and support for the developing theory. The categories derived from open coding, and the conditions derived through axial coding, are indicated through the use of capital letters. The concepts which comprise the categories are identified through the use of inverted commas. For evidence underpinning the results of open, axial and selective coding refer to the audit trail (Appendix 10).

The results of constant comparative analysis were portrayed through the integration of fieldnotes, interview and participant/non participant observation data (italic script). As indicated earlier in the thesis, key participants were also asked to review the preliminary findings of the study (Ball, 1999) and their contribution (Appendix 9) has

also been incorporated into the developing theory. Thus the participants revealed the essential elements of the paradigm model (Figure 5:1). Member validation and co-analysis (Section 4:6) also represented the co-creation of the paradigm model placing it within the constructivist paradigm.

5:3 The Contribution of Open Coding to the Emerging Theory

Open coding was performed following the administration of the first interview schedule (Appendix 2). The preliminary stages of open coding produced categories which later became subsumed within the construction of the paradigm model (Appendix 14). As such they represented an intermediate stage of analysis and were not included within this chapter. The categories to be portrayed represent only those which were integral to the paradigm model. They included: Enhancing Patient Stay, Improving Patient Outcome, Legitimate Influence and Knowledge Development and Dissemination. The first two categories generated related to patient experience and outcome. Legitimate Influence and Knowledge Development and Dissemination were identified during open coding as Trustworthiness and Promoting the Role. The rationale for the collapse of these categories is provided in Appendix 14:2 (I) and (VII) specifically.

During the data collection period (January 1996 - December 1999) many of the advanced nursing practice roles, particularly those of CNS and CNC, were under threat in the countries where data was collected (Sections 2:1 and 4:4). Participants, therefore, represented those who demonstrated continued success in the role, were in employment and available for interview. A possible explanation of this continued success in the role, during an era of 'reengineering', was the emphasis placed by the participants on patient related activity. Reengineering seeks to identify measures required to improve performance in relation to cost, quality, service and speed (Hammer and Champey, 1993).

The remaining categories referred to the professional expectations of the advanced practice role. Professional expectations related to the trust placed by other nurses in the advanced practice role because participants demonstrated both 'credibility' and 'expertise'. Although, the concept of expertise later developed into 'advanced clinical nursing practice'. A further expectation appeared to rest in an ability to promote the

role through presentation and publication. The categories were defined in terms of the concepts from which they were derived, as recommended by Strauss and Corbin (1990) and as befits theoretical definitions (Section 3:4), as follows:

(i) Enhancing Patient Stay

To achieve a standard of excellence (Quality) for patients' whole experience (Continuity) in hospital and beyond, by decreasing the trauma of critical illness and crossing traditional boundaries. Knowledge is acquired by the patient (Patient Education) resulting in improved understanding of the problem which required hospitalisation and on-going self management.

(ii) Improving Patient Outcome

Activity is centred upon (Focus), and responsibility taken for, enabling patients to demonstrate improved physiological, psychological and social ability in resuming their former role and function within the community or adapting to the restrictions placed upon them following critical illness (Restoring).

(iii) Legitimate Influence (Trustworthiness)

Credibility (Credibility') and advanced clinical nursing practice (Expertise) are demonstrated to the extent that the whole interdisciplinary team believes in the APN's ability to identify and alleviate problems associated with critical illness and achieve positive patient outcomes.

(iv) Promoting Knowledge Development and Dissemination (Promoting the Role)

At an advanced level of nursing practice, knowledge of the speciality is developed and disseminated both verbally and in writing (Lecturing and Publication), through research and active participation in professional organisations (Professional Organisations).

It can be seen that the first two categories were patient focused and the second two underpin these (Figure 5:1) indicating the prerequisites necessary to enhance patient stay and improve patient outcome at an advanced level of nursing practice, within

the context of adult critical care. In the first instance the data was analysed and the conditions were constructed separately under each category as demonstrated in Figure 4:3 and Appendix 15.

The basic structure of the paradigm model, is presented in Figure 5:1. It can be seen that the categories developed from open coding analysis are represented in bold and italic script. The 'conditions' (causal, strategic, intervening and consequences) are underlined. The concepts, 'credibility' and 'advanced clinical nursing practice', generated during open coding and refined during axial coding, are represented in Figure 5:1 as properties of Legitimate Influence. This research demonstrated that without these two properties legitimacy cannot be established. The importance of 'credibility' and 'advanced clinical nursing practice', were raised continuously by participants during the administration of the second and third interview schedules and during participant/non participant observation. These properties and their relation to Legitimate Influence demonstrate the key feature of this research study and will, therefore, be explored in greater depth following presentation of the paradigm model (Section 5:5:1). The paradigm model will now be presented in terms of the conditions which formed the main theoretical constructs of the emerging theory.

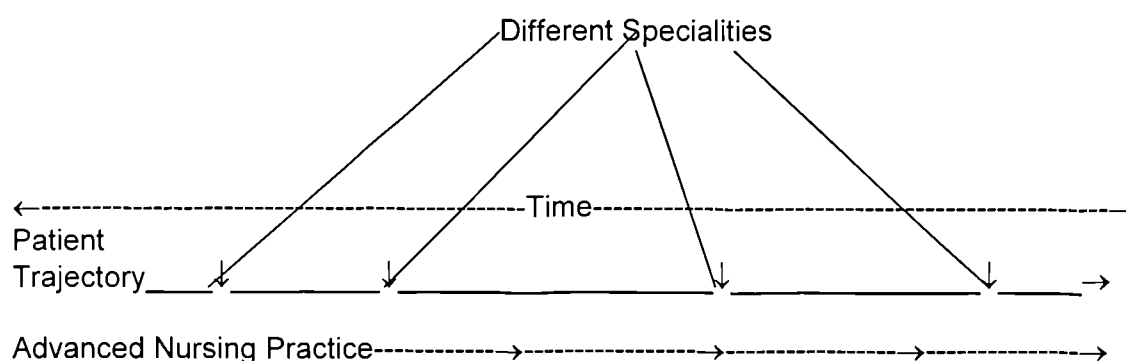
5:4 The Contribution of Axial Coding to the Emerging Theory

5:4:1 Causal Conditions (Figure 5:2)

The causal conditions represent the cause of the core category, why it exists (Section 4:7:2; Figure 4:3). The purpose of portraying the causal conditions which follow was to establish the infrastructure within which Legitimate Influence may impact upon Enhancing Patient Stay and Improving Patient Outcome. There were four major causal conditions (Figure 5:2) necessary to influence Enhanced Patient Stay and Improved Patient Outcome. These were Whole Trajectory of Patient Illness Seen as a Priority and Focus on Outcome. Those remaining refer to Leadership, both in Clinical Practice and within a Specialist Area of Knowledge.

The whole trajectory of a patient's experience of critical illness and a focus on patient population, rather than a specific geographical location, was continually emphasised by participants. This process is represented by Logic Diagram 1:

Logic Diagram 1 - The delineation of advanced and specialist practice in terms of patient population and geographical location



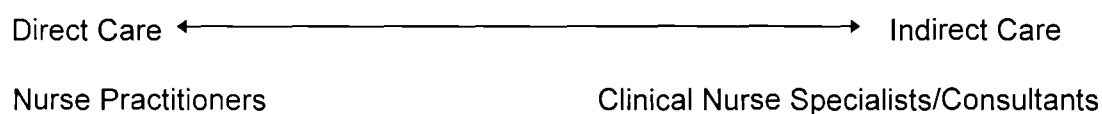
The diagram represents the continuity of advanced nursing practice throughout the patient's experience (or trajectory) of illness or need (horizontal lines and arrows). As opposed to the range of different specialities (and therefore nurses) the patient may experience in one period of hospitalisation. The vertical arrows represent the different groups of nurses the critically ill patient normally meets during one period of hospitalisation. Examples of this may be a ward, operating theatre, intensive care unit, high dependency unit and another ward. Contextual fieldnotes and participant observation demonstrated this movement through various specialities was a threat to the continuity of care each patient should expect. Continuity of care formed a major component of the strategic activity associated with advanced nursing practice in adult critical care (Figure 5:4) and will be discussed in more depth in section 5:4:3.

Following the patient through a trajectory of care involved both indirect and direct modes of engagement between the advanced practice nurse and the patient. For example, indirect engagement was achieved through the development of care pathways, ... *a streamlined process ... cut down on variances ... so we concentrate on high volume presentation types of patients, such as drug overdose patients, chest pain ... and what we did is to develop a clinical pathway (10)*. Direct contact was achieved through ... *being able to care for patients from start to finish - having someone come in with a specific complaint, addressing their issues, solving the puzzle, so to speak and moving on for them to*

a better place (35) ... Indirect engagement with the patient's trajectory of care was usually a feature of CNS/CNC practice, whilst direct contact was maintained by nurse practitioners.

Contextual fieldnotes indicated that a direct or indirect approach to the trajectory of care exemplified the major difference between nurse practitioners and clinical nurse specialists/consultants in this study. Nurse practitioners were involved in the direct management of patients' health related problems, whereas clinical nurse specialists/consultants were more likely, although not exclusively, to focus on indirect measures. For example, they were more likely to influence other nurses in improving patient care rather than having a defined patient caseload for whom they were personally responsible. However, this was not a consistent difference within the data and is more appropriately represented by a continuum than diametrically opposed entities (Logic Diagram 2).

Logic Diagram 2 - The Direct and Indirect Care Influence of Nurse Practitioners and Clinical Nurse Specialists/Consultants



The literature (Section 2:1) demonstrated a reduction in the number of clinical nurse specialists and this was also apparent in the data from this study. Indirect care provision placed the role of clinical nurse specialist/consultant in jeopardy because the value of the role may not be immediately apparent ... *the argument in Australia ... they said we can't attach worth to a CNC's role, we don't know how to work that out and that's again (what) the conference ... was all about ... setting up infrastructure and infrastructure leads to economic patient care and quality outcomes, improved patient outcomes and things like that ... you can actually (place a) value (on) the work that you do (12) ...* Therefore it was necessary, for roles where direct patient care and management were not major features, that a Focus on Outcome was demonstrated ... *It will always have an impact on the value of the role and the job because the focus of the job is the outcome (8) ...* and that the consequences of the advanced practice role, specifically in relation to patient care, management and outcome were made apparent.

It was also interesting to note that those who were involved in direct care were able to differentiate the type of care given in contrast to that supplied by other professionals, ... *In addition, because I knew her and was involved in her procedure as an advanced practice nurse, I was able to effectively treat her physically and psychologically in a timely manner. No coverage intern/resident would be able to know all the details of her history, figure out what she had done in the cath lab and be able to provide this care. Being involved ... is especially helpful, since I knew if there were any problems like "jailing the side branch" or coronary spasm (36) ...*

There were various pre-eminent properties or characteristics associated with the causal conditions - Whole Trajectory of Patient Illness Seen as a Priority and Focus is on Outcome. These were identified as Nurse Orientated - Professional Properties:

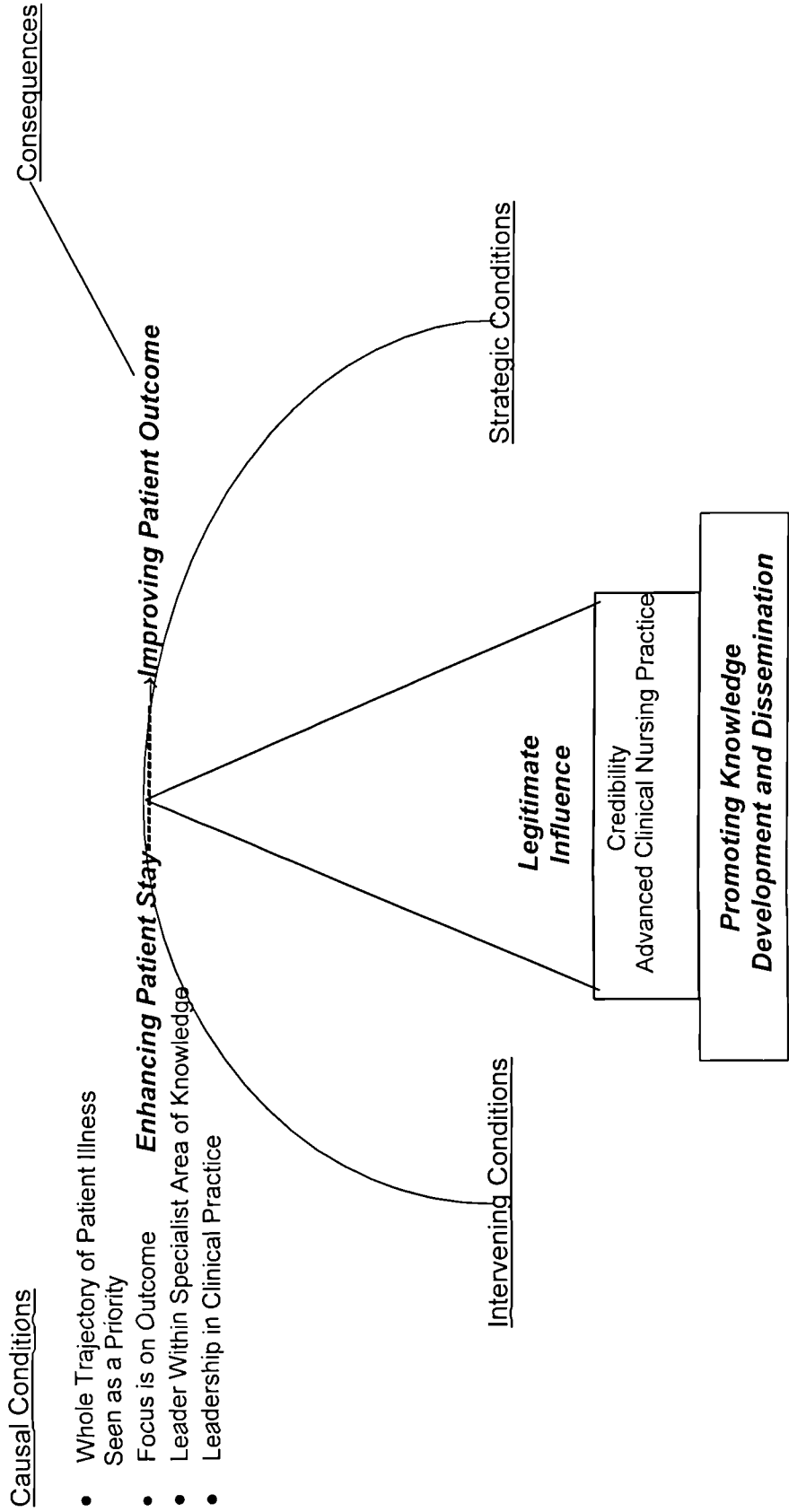
- an ability to prioritise
- identify patients' needs over time
- broad perspective
- determining criteria for success
- autonomy
- accountability

These signified the key professional characteristics which were representative of advanced nursing practice in adult critical care. Participants emphasised the importance of setting priorities and how difficult that was ... *you're so visible and you're so available that everybody wants you in five different directions so that's when you have to stop and say hang on, hang on lets just sort of break this up a bit, what do I really need to be doing but otherwise you can tend to get your time bogged down in some other role ... so you've got to work out what the priorities are at the time (19).* It was also important to be able to identify the needs of patients over time and demonstrate sensitivity towards their own unique individual needs, rather than just those of a particular disease or nursing model, ...*here's an individual, who has this kind of job to perform or is a mother with children so she can't go home and rest, but we could give her other options (13) ...* and another participant, ... *we asked the patients to list all the things that they could currently do before they came into hospital and the things that they wanted to be able to get back to when they're home and it isn't just ADL (Activities of Daily Living) sort of things it is actually things that they liked to do for themselves and we got them to list those and then we'd sit down and talk to them and that is where I was able to do what the nurses couldn't*

and look at why those things are important and how ... long they thought that it would take so we could see whether their goals were realistic or not because some people have totally unrealistic goals and you don't realise that they've got them ... and if you don't find that out early and deal with that you're going to have a big problem at the other end (25) ...

A broad perspective was also necessary, ... *So I see the role much more broadly, I see it, my role, as much more community based as well as in the hospital. So I do things like next Monday I'm going to a neighbourhood watch meeting to talk to some people about heart disease, next Friday we've actually developed a programme to go out to nursing homes and talk about heart failure management (22) ...* A broad perspective indicated actions taken to inform or protect those at risk of developing critical illness, as the verbatim text above demonstrates. This perspective also required a broad view to be taken in relation to different departments, ... *it was made very clear to me ... that I needed to spread, spread myself you know wider (laughs) which was fine (24) ...* and in terms of staff the advanced practice nurse interacts with, ... *not confined simply to nursing, my practice and the change process that I need to ... encourage within my working environment involves clerical, involves orderlies, involves the cleaners, it involves medical staff, it involves nursing, it involves the consumers of this service so therefore if I'm limited to just one focus then I may miss opportunities (27) ...*

Figure 5:2 - Paradigm Model - Causal Conditions



The diagram represents the causal conditions necessary to achieve Enhanced Patient Stay and Improved Patient Outcome at an advanced level of nursing practice in adult critical care.

Criteria by which success could be determined were a key feature of Focus on Outcome. Criteria tended to demonstrate specific factors, such as, ... *preventing complications; skin breakdown, pneumonia's, infections ... problems with aspiration, line infection (9) ...* and quality initiatives, ... *Certainly patient satisfaction I think is a huge measure of outcome because there are so many people who aren't ... happy um ... and who, and therefore aren't compliant so that's a huge measure of outcome (13) ...* Personal reflection and discussion with a key participant (Participant 30) revealed that the type of criteria identified above appeared to reflect dominant economic forces within health care systems and represented global fiscal concerns.

The final properties, associated with the causal conditions - Whole Trajectory of Patient Illness is Seen as a Priority and Focus is on Outcome - were autonomy and accountability. Autonomy related to the area of practice an advanced practice nurse had influence over and as a key participant reflected (Appendix 9:14) it was patient focused, not status orientated. That is to say, autonomy was enacted to benefit patients rather than gain professional status ... *autonomy in that ... I have the ability to initiate what I feel is important, what I believe in ...* A perceived lack of autonomy was one of the major areas of difference noted between those working towards or holding a higher degree and those who did not. For example in relation to evaluating patient outcome, from one participant who had not studied for a higher degree ... *No, I haven't done anything formally in regards to ... reviewing patients and their satisfaction ... it's all been observational ... so no I don't know if it's decreased length of stay or not (15) ...* and another participant ... *we don't measure those types of things (25) ...* Also in relation to asserting beliefs about the value of the advanced practice role ... *I haven't taken that on board yet (15) ...* There also seemed to be an element of asking permission amongst those who did not hold a higher degree, for example in terms of initiating continuity of care into the community ... *Well that would be the plan ... which I'm not in a position to at the moment (16) ...* Powerlessness also appeared to be a manifestation of reduced autonomy ... *if you put us all together we may have some power ... but we don't use it (21) ...* and another participant ... *A whole lot of things I can do quite easily but I wonder whether or not that's what I'm supposed to be doing whether that's well a good use of the organisations time and I often think people send you off to do these things, I think is this really what I'm here for (25) ...* Those who had not studied at postgraduate level represented a negative case, i.e. were not representative of, the developing theory. The identification of negative cases indicated theoretical saturation may be apparent

(Section 4:6). This finding became a key component of the final discussion associated with the substantive theory presented in this thesis (Section 6:2:4).

In relation to the property of autonomy, no professional is truly free to act without codes and precepts in practice and the advanced practice nurse was no exception. However, it was evident that various forms of practice, previously in the domain of other professions, were being expanded ... *the triage person is expected to act on their own assessment to start the decontamination process straight away whereas it was normally medically initiated (12) ... and ... I think you do have to work within a safe and legal framework obviously and a professional framework, and so the freedom I have is only within certain parameters. So for example I think that we should be able to prescribe certain drugs, and of course this is still a sticking point with the legal issues. So what we have explored in this Trust is, like lots of other Trusts, is protocolised prescribing (33) ...*

Accountability was taken very seriously and it was continually emphasised during the later stages of data collection ... *the way in which I'm accountable is through ... my performance, ... I mean the buck stops with me really (21) ... and another participant ... a 24 hour responsibility 7 days a week (33) ...*

It was difficult to find evidence within the interview data which would demonstrate the causal condition, Leader within Specialist Area of Knowledge (Figure 5:2), without breaching confidentiality although many participants alluded to publication and presentation. It was therefore decided, with agreement from the advisor to this thesis, that a reference list of publications produced by advanced practice nurses who had not participated in this study should be compiled as evidence (Appendix 5). In reading the cited publications in-depth knowledge of the speciality was evident, lucid arguments were presented and cogency of style was apparent.

Leadership in Clinical Practice was seen to be an important prerequisite for the effectiveness of advanced nursing practice in adult critical care to be established (Figure 5:2). In the first instance this required a formal stance to be taken ... *you have to lead from in front but equally you have to make sure the checks and balances are behind you to ensure that you've got things in place (31) ...* From this data, supported by contextual fieldnotes, it was necessary to ensure that, as an advanced practice nurse, other nursing staff also 'owned' innovations to practice and wished to improve the care and management of patients. This implied the development of a culture in

adult critical care where patient needs were paramount. Sensitivity to the developing skills of other members of staff also had to be acknowledged, so that in some instances Leadership in Clinical Practice required participants to step aside and let others own practice development. This was evident during participant observation, when the participant initiated a particular innovation, but then let others develop the idea and formulate policy. Interview data also supported this view ... (Researcher) *Another factor that people have raised with me is this issue of leading from the front ... but then hoping that people will take things on. So you lead from the front then you move to the side then move back in sometimes again. Would you see your role very much like that?* (Participant) *Absolutely. I always felt in a way, you know when you introduce something successfully when no one can remember when it started and whose idea it was in the first place, it's become part of the culture (31) ...*

Properties associated with Leadership in Clinical Practice were:

- risk taking
- stimulus response proactive
- vision
- flexibility
- astute
- empowers nurses
- postgraduate education
- perspicacity
- stamina
- assertive

Risk taking involved being able to admit errors ... *In fact one of the biggest ones is being prepared to actually expose yourself saying, look this didn't happen right, you know or I didn't do this the right way, there is a better way to do this. So you must be prepared to expose yourself. Critically analyse what is going on both in terms of context and content (31) ... and ensure personal limitations were acknowledged ... you must not, I believe, encourage people coming up with you to think that they have got to be all knowing, because that's where arrogance lies ... (33)*

A proactive response was characterised through self direction ... *you're very self directed, you have to be very self motivated (15)* ... Therefore the focus of advanced nursing practice was to improve patient care and management, rather than responding only to administrative or managerial directives, as one participant stated initiatives in nursing practice ... *should not be directed by management issues but ... through problems arising from clinical practice (30)* ... Another particular element of advanced nursing practice revealed in the data was the ability to articulate a particular vision ... *you need a vision for the future of what you really want the role to be and what you want it to evolve into; ... the wherewithal to make it happen and put it all together because without being able to do anything a vision is nothing you know (1)* ... This clearly indicated the distinction made by Obholzer and Roberts (1994) in relation to management and leadership (Section 1:1).

Flexibility also needed to be discernible ... *I think you've got to be able to read the waters and to make the right turns and left turns that are needed (8)*. In order to make the right choices astute decisions had to be made ... *its going to take an astute personality to be able to determine what it is the institution needs, what the practitioner needs and if that match works for that person (8)* ... and it appeared this was an inherent characteristic as ... *those are lessons that school doesn't teach you (21)* ...

Associated with Leadership in Clinical Practice was the importance of empowering other nurses. Empowering nurses was usually associated with the devolvement of decision making processes about patient care ... *so we allowed them to make that judgement themselves (12)* and also as part of innovative practice ... *I get an opportunity to discuss changes, to make them feel part of the change process and to empower them so I think that's ... innovative practice within your work environment (27)*. Contextual fieldnotes demonstrated this was markedly different to hierarchical structures where nurses were instructed to make certain alterations to their practice. It was interesting to note that even though the specialities included in this study varied in terms of patient population (e.g. cardiac, neurological, trauma, emergency), size of Unit (6 to 18 beds) and number of nurses employed (~56 - 120), at the time of data collection none of the clinical areas had a shortage of nursing staff. This may, or may not, be a result of the presence of advanced practice nurses, but certainly hospitals in the UK without this level of practitioner suffer a severe shortage of nursing staff in adult critical care areas.

Finally, the majority of participants were united in their support for postgraduate education as a minimum level of preparation for advanced nursing practice, thus attaining ... *mastery at masters level (27)*. A contrast between those who were in the process of attaining or had attained higher degrees, and those who had not, has already been demonstrated in relation to the exercise of autonomy. For many of the participants, the attainment of a postgraduate degree did not immediately imbue the nurse with the ability to function at an advanced level, nor was it the only criteria ... *I don't think it's the only ingredient necessary for the recipe basically, but its certainly an essential one (27)* ... An ability to practice beyond the level of expert was also a necessary prerequisite ... *and this takes time ... and that's really hard to teach to somebody who's young and junior and who wants to go places(13)* ...

The above properties of Leadership in Clinical Practice represented professional attributes. Personal characteristics were also evident within the data and entailed- perspicacity, stamina and assertiveness - from the collapsed category Tenacity, (Appendix 14 - Figure E). These became properties of this causal condition as their presence was integral to the enactment of Leadership in Clinical Practice. Contextual fieldnotes demonstrated that perspicacity was evident in the ability of the advanced practice nurses in this study to identify issues of real importance which needed to be acted upon, and those which might be dealt with at a later date. Examples of immediate issues involved those which were patient orientated such as maintaining consistency of care across geographical boundaries. To deal with the competing issues which faced participants in this study there was a need for the containment of certain issues; identifying what was possible or impossible at a given time. To effectively manage competing tensions stamina and assertiveness were required.

Extrapolation of the causal conditions has demonstrated the prerequisites necessary for advanced practice nurses to legitimately influence patient experience of critical illness and improve outcome. Predominantly, the conditions were patient orientated concentrating on the maintenance of consistency across the entire trajectory of illness and focused on the outcome of patient populations rather than the short term objective of haemodynamic stability and discharge from the critical care unit which is more redolent of specialist nurses and a customary level of practice in adult critical care (Section 1:2). Leadership, both of practice and within a specialist area of knowledge was also necessary if a patient orientation to innovations in practice were

to be evident. The professional and personal characteristics outlined above indicated the attributes necessary to effect Legitimate Influence. However, the ability to achieve and maintain Legitimate Influence can be constrained or facilitated by intervening conditions and these will now be elucidated.

5:4:2 Intervening Conditions (Figure 5:3)

Intervening conditions were those which constrained or facilitated strategic conditions (Section 4:7:2), undertaken as a result of Legitimate Influence. They therefore had an impact on upon the categories of Enhancing Patient Stay and Improving Patient Outcome. Several factors emerged from the data as constraining or facilitative elements. These represented the micro and macro processes associated with symbolic and interpretive interactionism (Section 3:3). Those manifesting a continuous presence in the data were Conflict, Resistance, Challenge, Political Awareness and Established Values. Two further conditions arose during administration of the second and third interview schedules. These were Overcoming Resistance and Gender Bias. Overcoming Resistance involved measures to counteract resistance to practice development and was therefore a facilitative intervening condition. Gender bias referred to a perceived discrimination against an advanced practice nurse as a female. This latter condition was not raised by all participants in the study, but was included because of the emphasis placed on the issue by both male and female participants.

Chief amongst the concerns surrounding Conflict, was the importance of deciding which issues were of sufficient importance to enter a situation where conflict would occur. In the continuous process of data collection, analysis and comparison, patient centred issues continued to be those about which participants felt most strongly. Terms used to describe this focus were '*choosing which hill to die on (8)*' and during non participant observation, terms such as '*nail your colours to the mast (30)*' were used.

Medical staff were identified by all advanced practice nurses, whether NP's, CNS's or CNC's, as the professional group with whom most conflict occurred ... *Well the patients are always the doctor's, unless they don't want them, and that is something that came out of the nurse practitioner* (Nurse Practitioner Project Phase 3 - Australia), '*how dare*

this person touch my patient' which really eats me because these patients are here for health care, they're not here for one person or another (13) ... Fundamentally, conflict arose over what was termed ... 'turf' or 'territory (13)' ... arguments. 'Turf' or 'territory' referred to various forms of patient management which had previously been in the domain of the medical profession. Contextual fieldnotes demonstrated examples which included challenging particular management decisions, independent referral of patients to another professional group, prescribing rights and undertaking skills such as arterial stabs to ascertain the presence of respiratory failure. Contextual fieldnotes also revealed the occurrence of tension if participants wanted to reassert control over forms of practice which had previously been within the province of nursing. An example of this was the use of the prone position in the management of Adult Respiratory Distress Syndrome, where the impetus to turn a patient was now often within the domain of medicine.

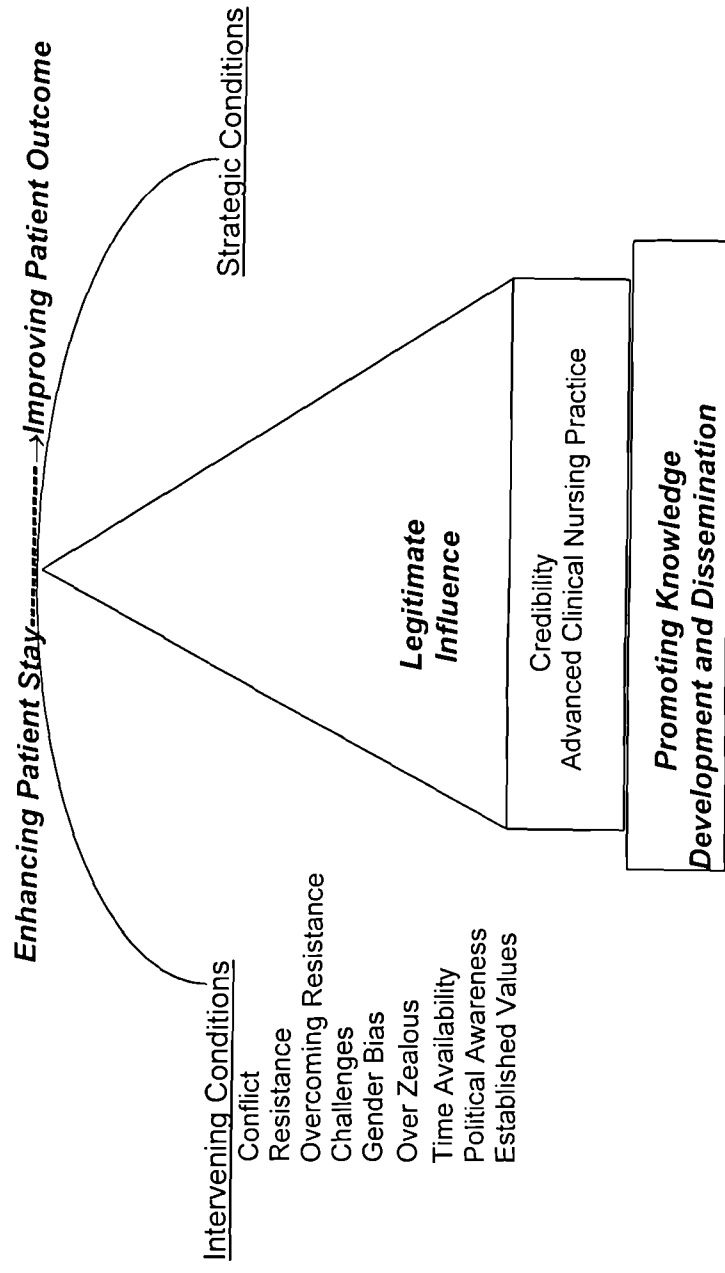
Participants perceived conflict occurred when medical practitioners felt they had not gained or were losing control of a situation ... *it is interesting to find that many of the ... conflicts arise over who is in control at any given time. Namely, if the medical practitioner feels he or she may not have control of the situation and they have high control needs ... there is always a conflict there (3)...* and another participant ... *They liked me enough to let me try a new position in this area of CCU (Coronary Care Unit) but it is still hard - 2 and a half years later - to get people to accept me in this role. It isn't the nurses but the MD's have difficulty relinquishing control ... (35)*

However, for many advanced practice nurses acceptance does come with time... *about medical staff having to give up control - that the director of our unit is quite happy to leave the logistics and the practicalities of how to get things done to me ..., and the same with writing up protocols and all that kind of thing, we jointly decide the protocols but usually ... the instigation of everything... I do most of that and I don't mind that because then I can either sell it or not probably (laughs) and so from that point of view I have a lot more control, I know, than some other people in my position have in other ICU's (Intensive Care Units) around town or interstate (20)...* Control was a vital element of power and as such represented a connection with the theoretical basis of grounded theory methodology - interpretive interactionism. The literature surrounding the exercise of power and dominance will be explored in more depth in the final chapter.

Causal Conditions

Consequences

Figure 5:3 - Paradigm Model - Intervening Conditions



This diagram represents the developing Paradigm Model, indicating the intervening conditions in relation to the four categories Enhancing Patient Stay, Improving Patient Outcome, Legitimate Influence and Promoting Knowledge Development and Dissemination.

Resistance continued to be an issue predominantly instituted by nursing staff, although some medical staff also demonstrated this tendency. From nurses ... *horizontal violence and I ... suffer that all the time ... oh negative attitudes towards what I'm doing, discussing me with their colleagues as if you know I'm not being productive or what does she think she's doing (14) ... and another participant ... I've sort of noticed because when things were implemented a year and a half ago I just felt that I was banging my head against a brick wall (12)...* Medical staff appeared resistant to innovation ... *I got that off some of the surgeons as well you know and one actually said to me, I don't believe in all that mumbo jumbo, education and case management, so it has been a bit of a battle (23) ... but attitudes did tend to change if patient care was demonstrably improved ... the cardiologists are very good ... even though they were against it, they said that, in the beginning, ... the salary for this job could be better spent on ECG (Electrocardiograph) technicians but they've actually been the most supportive and they've been really good you know like ... nurses initiating ceasing telemetry and they supported that (23)...*

Resistance was an intervening condition which imposed constraint. However, a more facilitative element also emerged from the data, that of Overcoming Resistance. Multiple examples were given by participants many of which concentrated on establishing 'credibility', a focal element of this study (Figure 5:1, Section 5:5:1) and 'developing relationships' as a means of Overcoming Resistance. The examples provided by participants related to medical practitioners ... *You have to be able to demonstrate confidence to the physicians (10) ... and another participant ... You bail their tails out of a mess, frankly, and their patients tell them how wonderful you are and soon they have to have you around (8).* Meetings were also seen as a useful method of Overcoming Resistance ... *I go to their ... cardiologist education meetings, I go to their mortality morbidity meetings, I have been seen, you know that's important and I will do my homework on issues that are involved and I make sure I have something to say and after a while they would listen (10) ...* Another illustration of Overcoming Resistance related to questioning the basis of certain decisions ... *not allowing them to say the same thing. It's (advanced practice nurse) 'can I have a look at this because I'd really like to understand where it is you're coming from because certainly this body of work is completely different' and usually it's something they've (medical practitioners) done 10-15 years ago - they haven't looked at, it's become custom and practise and then rather than bringing out all this ancient stuff, and embarrass themselves, it invariably changes. So it's fine (31)...*

Another example of Overcoming Resistance related to institutions not really knowing why they hired advanced practice nurses ... *you need to demonstrate to them why it is they hired you (8)* ... Contextual fieldnotes indicated methods employed which demonstrated effectiveness to this specific group were raising the profile of the institution as represented by the strategic condition Quality Enhancing (Figure 5:4), expediting patient stay and increasing patient satisfaction which were identified as the consequences of the paradigm model (Figure 5:1; Section 5:4:4). If these indicators were evident it appeared less likely that decisions to mix management and advanced nursing practice roles would be made. However, if these roles were combined it was likely that advanced nursing practice would be subsumed within the exigencies of the management or administrative agenda ... *In a couple of situations ... the CNS or the nurse manager ... has left and the other person has taken on that other person's role and I think they have, across the board been unsuccessful (9)...*

However, most emphasis was placed on Overcoming Resistance displayed by nursing staff ... *My recommendation would be to pair the person with the most resisting person in the unit ... I always do that when I take a job (8)* and later the same participant stated ... *My rule is that I choose the sickest patients in the unit, always. Because ICU nurses are combat girls and they know if you can't do it; get out of here, so if you just stay with the sick patient, usually the patient is so sick that despite who the nurse is, she doesn't have a lot of time to be nasty ...* Building up relationships with fellow nurses also appeared to be a key element in becoming accepted ... *it isn't any problem and you know half an hour taking a patient from here to here. And you know, that builds up relationships (10)* ... and another participant ... *people are saying "well you know, can you help with this patient?" and I always say "yes"(6)* ... These examples demonstrated the importance of positive responses to requests for help in building effective working relationships.

The following examples were also evident which demonstrated a relationship between, 'broad perspective', a property of the causal conditions Whole Trajectory of Patient Illness Seen as a Priority and Focus is on Outcome and the intervening condition - Overcoming Resistance. Action was taken to build up relationships with a wide range of people ... *explaining my role to all these people (medical practitioners, nurses, pharmacists, other hospital staff - e.g. transcriptionist). A lot of this I did one to one, especially with the nurses. I set up meetings with key people like the Medical Staff Director, the Pharmacy Director, the Director of Nursing, the Nurse Managers ... I wrote an article for*

the medical staff newsletter ... By incorporating nursing staff education into my role, I was really able to win over the nursing staff - by being more approachable than the medical practitioners, teaching as I make rounds ... "lets look at the ECG together", "listen to this heart sound", providing informal unit inservices on topics that they request or I see a need for, bringing them posters, scheduling lunches with drug reps, answering all their questions and not making them feel they are "dumb questions" and doing so in such a way that they understand. Praising them when they make a good assessment or judgement (37)...

The role of the advanced practice nurse was also tenuous ... *I knew any day my job could be eliminated. I struggled to establish myself, and I knew I had to forge ahead and be persistent. I appreciated the little gains as very important accomplishments. After being frustrated at a lack of progress in my role or my inexperienced skills, I learned to be patient, take on even small tasks to establish my 'credibility' and accept small gains as progress (34) ... and therefore realistic targets had to be set in Overcoming Resistance.*

Other factors associated with Overcoming Resistance were 'negotiation, role modelling and valuing the contributions of others (Appendix 15 - Logic Diagram B). 'Negotiation' was undertaken with medical practitioners, nurses, patients and hospital management (Appendix 14 - Figure F). Contextual fieldnotes indicated different skills were used and perspectives taken in the process of negotiation. Of importance, in relation to the peer group, was the necessity for shared values and a unified perspective of what 'nursing' in a particular speciality was aiming to achieve. This illustrated the importance of a shared vision in the delivery of adult critical care services.

Negotiating relationships with medical practitioners tended to be more persuasive, although challenging at times, than combative. A recurring element was the necessity of keeping medical practitioners informed of practice development and research. It was possible that these findings reflected an attempt to develop a more collaborative approach to clinical practice than one which consistently challenged the current balance of power. The way to success appeared to be in making advanced nursing practice indispensable. A lack of success seemed unavoidable if the advanced nursing practice role was seen as a threat ... *to demonstrate to them (medical practitioners) why exactly it is they need me, they have to have me and right now they believe they have had a religious experience and they need me (8)...*

Patients did not seem to be well informed about advanced nursing practice and accepted individuals functioning as nurse practitioners or clinical nurse specialists ... *The negotiation with the patient is the easy part. It has to be one to one (1) ... and another participant ... families are probably easier ... open to somebody who can give them what they need to take care of themselves ... as long as there is baseline confidence ... that front is not really a major front to deal with (8) ...* Successful negotiation appeared to result through the provision of the information required, for patients and families to deal with the impact critical illness was having upon them.

In negotiating advanced practice roles with hospital management contextual fieldnotes and interview data indicated that, for the role to be maintained, it had to be seen as important. Therefore in 'selling' the role it was necessary to address issues important to the institution or department ... *that sometimes they might not know what a nurse practitioner is ... but after they realise the services I provide are much better ... they come around very quickly. They hold me accountable to make sure they get the information they need (1) ...* Contextual fieldnotes revealed such factors as improving recruitment and retention, decreasing length of stay (LOS) and increasing satisfaction/quality care were likely to be of prime importance to this group.

The use of humour was seen to be important in the negotiation process ... *I do use humour and try to lighten situations because things can get very intense (9) ... and a non-aggressive manner ... I think a lot of nurses have been I guess counter, oh I guess being really counter productive to their own advancement by being antagonistic to doctors (22) ...* were the main examples identified. Again this exemplified the power relationships which may exist within the interdisciplinary team and formed the basis of future discussion (Section 6:2:2).

'Role modelling' was also used as a technique to Overcome Resistance, particularly within the peer group ... *this morning for example I was asked ... the nurse was wanting to check her physical assessment with me and say you know 'was this right you know what do you think?' so we spent at least an hour sort of going through that whole, assisting her and the patient (14) ... and another example ... caring for patients on CPAP, (Continuous Positive Airways Pressure) understanding the principles behind CPAP, looking at a patient that may be going into respiratory failure ... being able to assess the cues ... warning bells ... to actually realise the patient's deteriorating ... there's probably only one or two (nurses) that have ever been involved in haemodynamic monitoring so starting from scratch ... ECGs*

... pulse oximetry ... working at the bedside with the nurses ... tracheostomy management ... preventing complications (15).

In valuing the contributions of others, all the examples again related to nurses. The main facilitative element was encouragement *... people will come up to me, nursing staff, and say why don't we do this or why don't we do that and I will say ... OK great idea (21)...* Feeding back progress was also integral *... you are continually needing to be in touch with the people that you're working with to get feedback from them on ... are you heading in the right direction? (15) ...* It was also important to avoid a defensive attitude *... where a staff nurse may say 'oh, at so and so we did this', as in a different type of practice, and saying 'oh, now that is interesting, let's have a look at the literature on that' (33) ... and encourage further development of the individual ... and so then going to the Net and doing a literature search with the staff nurse, pulling off the stuff, looking at it and critiquing it with her and, or even giving it to her and saying 'now, ... read that journal article and tell me what's good about it, what's bad about it, are there any problems with it? (33) ...'*

Challenges arose from the major gatekeepers of practice and constrained or facilitated strategic action. Gatekeepers were identified, by the participants, as medical practitioners and hospital management. From the medical practitioners challenge tended to be an issue of the advanced practice nurse demonstrating 'credibility' in practice. Again this emphasised the importance of 'credibility' to the success of the role (Section 5:5:1)... *the greatest challenges we have probably come from the medical practitioners ... I think that depends on how well you know them. How credible you are to them and also how you approach the situation (3) ...* and another participant *... Actually, I was the first ACNP in the hospital. So gaining 'credibility' and acceptability was VERY challenging. Although I have made great strides in my role, I still need to 'prove' myself and my worth (34) ...*

The challenge from hospital management lay in the lack of insight into the utility of advanced practice nurses *... in the early time for me in terms of me achieving it all ... first learning it; institutions not having the role and not knowing why it is they hire you. There are always some tense, challenging situations (8) ...* and another participant *... they (Administration) don't really understand exactly what I do (15) ...* Contextual fieldnotes demonstrated this lack of knowledge often led to repeated evaluations, and time and motion studies being carried out, which diverted the activity of the advanced practice

nurse away from patient welfare, and culminated in frustration ... *the problem we have is that the people who fund us still don't understand what we do so they don't understand why they should pay for us, so there are constant conversations ... about why they should pay for us ... it drives me nuts. I'm now intolerant of them and have to have a valium before I go in the room or I'll smack them ... because they just cannot understand that you move between all of the services and link the whole lot together so what we doing is a marvellous public relations exercise for this hospital and ... patient outcomes that they want to see (29) ...* It can be seen that hospital management needs to develop a clear expectation of the advanced practice role which should be discussed with the advanced practice nurse to ensure perceptual congruence. Evaluation of the advanced practice role, whether it is performed by the nurse individually or as a process of appraisal, needs to identify criteria which determine improvements associated with patient experience of critical illness and the contribution made by a particular advanced practice role to positive patient outcomes. Evaluation of the advanced practice role as portrayed in this thesis became a primary feature of the final discussion (Section 6:2:1).

However, challenges also surfaced from other areas ... *whenever you are dealing with other people there is always a challenge now, the person could be a professional within their own field or even colleagues you work with, the patient, relatives, they all represent a challenge even if they make you challenge your own views (31) ...* and not all challenges were seen as unwelcome ... *that's part of the role that you take on that you know that you are there to challenge and to look at assumptions but also people that are here ... to challenge you as well to say 'well what are those issues' and I suppose that comes with the job ... that's good and I welcome that and want to be challenged ... I feel that's part of the job really and people do challenge me and do ask me things(32) ...*

Gender Bias was raised as an issue by the first male participant in the study ... *I think the fact I am a guy has a lot to do with that. I think a lot of doors are open to me that are not open to women ... I think a lot of that is still true even though it is not talked about anymore. I think the gender issue is really still alive out there (1) ...* and by some of the female participants. Where it was raised great emphasis was placed on the constraints it imposed upon performance of the role. Two of the female participants raised the issue of being confronted either by male nursing staff or male doctors ... *I teach the SHO's once a month about various things, and there is always one in the group, usually a man, ... who thinks he knows it all (33) ...* and from the male nurse, ... *Males often have to "catch you out" demonstrate something you have said is wrong. It's about being told*

something by a female (30) ... This may be a gender issue or it may be one of determining the 'credibility' of the advanced practice nurse, as described by another participant ... they took on this nurse practitioner initially because they felt that it is a way just to get an extra pair of hands and a bit of extra funding ... and they weren't really that convinced that it would work and one of the GP's in the practice, Chris, was dead against the idea from the beginning and what could this woman teach me ... by the end of the study he'd completely turned around and was pleading to keep this person on and keep the funding for this person because he had learnt so much in how you approach health care ... in different ways and the nurse practitioner had offered so much (13)... This extract appeared to indicate that the issue was one of gender bias in the first instance, but altered over time.

Responses may also be a reaction to change, rather than gender orientation ... *Interestingly when I did the nurse practitioner I referred a patient to one of the outpatient clinics, I think to an Orthopaedic Specialist and signed my name at the bottom, and signed it nurse practitioner and got a scathing letter back saying who is this woman and how dare she touch my patients. Within a couple of months ... I assumed the role of Clinical Nurse Consultant because the study was over and referred a patient to him as CNC and I got a thank you letter, thank you for referring this patient and it could only have been that my title was different, that the nurse practitioner wasn't there, to kind of bring about that inflammatory response (13).*

It could also be an issue of youth and confidence ... *getting back to the junior medical officers, I think that's one of the biggest stumbling blocks for them is that they don't have maturity, they don't have presence of self they don't know how to deal with people and I think they have great knowledge but they just don't know how to apply it and they don't know how to deal with ... issues that arise (13) ...* It appeared that junior medical staff did take cues from their seniors ... *one of the interesting things with ward rounds is that I think that's where a lot of behaviour is learnt so if the junior medical staff see the consultant respecting what I'm saying they'll realise that they should listen to me (17) ...* Contextual fieldnotes demonstrated many of the well established participants had little difficulty interacting with senior male medical colleagues (Sections 5:6:1; 5:6:2). This was identified during participant observation, where the opinion of the participant was asked, points of clarification sought and decisions agreed with senior medical staff.

When participating in certain committees it also appeared to some participants that they were not valued ... *I mean you're not an equal participant in the decision making process, and you're not valued for a particular contribution or expertise the same as the medical people in those groups (14) ...* and this appeared to be borne out by the following statement ... *I've just started on the ethics committee because I'm replacing a person who was doing it before and she said to me, she said oh you will of course be asked to do the minutes when er ... er the secretary goes on leave ... and I said I will, will I? (14) ...* Again it was somewhat difficult to differentiate the issues involved here - does this demonstrate a devaluing of women or of nursing?

In the open coding section passion and enthusiasm (Appendix 14 - Figure C) were seen to be essential characteristics, ... *If this kind of work is not done with passion then it is miserable to do, its got to be work you want to do (10).* Continuous comparative analysis demonstrated that taken too far this might inhibit effective performance ... *sometimes my own staff may find me very intimidating and its the battle that I have with trying to be er sort of passionate about my work without being overbearing to some extent, its a fine line and I and I don't always walk it well(27) ...* Therefore being over zealous may reduce the impact of Legitimate Influence on Enhancing Patient Stay and Improving Patient Outcome.

All participants felt pressed for time and many worked in excess of agreed working hours ... *It is constraints of resource so time either because you don't have the numbers of staff or the volume of work load and time inevitably also means money as well because if you haven't got enough staff you're talking about establishment. I would say those have been the biggest confines rather than anything else ... they're the major intervening factors to stop you moving things (31) ...* However, many CNSs who participated in the study found it was difficult to find time for clinical practice when there was a considerable amount of pressure to attend meetings. This was evident during participant observation ... *Some APNs are always in practice i.e. NPs - however others e.g. CNS and CNC do seem to have difficulty accessing time in practice - clinical practice time is impinged upon by practice development and promoting advanced nursing practice. This results in sometimes feeling it is difficult to maintain confidence in clinical ability (30) ...*

Two remaining facilitative elements were identified as intervening conditions. Both had been previously identified during open coding analysis (Appendix 14 - Figures E and F). These were Political Awareness and Established Values. Political

Awareness entailed the manipulation of various bureaucratic systems in order to expedite patient movement through various departments, stakeholder involvement and marketing the role (Appendix 15 - Logic Diagram A). Political awareness was demonstrated by having ... *a sense of the game plan (3) ... and the need not to 'push things' too far too quickly ... the nurse practitioner or advanced practice nurses, and it's really in its infancy, and to upset the apple cart now would probably (build a terrific wall) and, well there's a big enough wall already and you don't want to add any more bricks to it (laughter), so its easier for me to back down rather than to push but then again there are degrees that I will push to and if there's somebody who has no idea at all of what I do then I will push it a little bit and say well I can offer this and this and I've been doing it this long, why don't you let me do it and if there's any complaints or any problems then I can call you instantly and you can be involved (13) ...* Involvement in some strategic planning was also seen as politically astute ... *we're really involved in some strategic management and planning long term (12).*

The disruption of various bureaucratic systems was required in order to ensure patient needs were met ... *Didn't make me very popular but I didn't have to worry about it. I wasn't popular, nobody knew who I was anyway. So it was a perfect time to disrupt the system (8) ...* Associated with 'disruption' was the realisation that it may lead to some unpopularity and to be prepared for this, as one participant explained ... *I didn't ask for permission, I asked for forgiveness (8) ...* Bypassing various bureaucratic processes appeared to come as second nature when facilitating the care of critically, or potentially critically ill, patients ... *they'll just tell you how glad they are to see your face, especially if they've had a few shocks (implantable defib) and you know they're in the emergency department ... they just say that they're very relieved when I come and speed things up for them ... one fellow who had never had a shock before rang up the other day and said I've had 3 shocks in 3 minutes ... and I said well just pop up to Coronary Care and I'll check it out ... I mean most of them are very confident about my clinical judgement and my ability to sort things out and to facilitate things and get an answer for them and in some way you know manipulate the hospital system (16) ...* Mobilising systems also facilitated the movement of patients ... *and I guess that my knowledge base comes a lot from just networking with other people and finding out what is available but now that I know that I can expedite people ... through the department (13) ...*

Activities undertaken to involve stakeholders were ... *needs analysis ... explaining therapeutic interventions to other professional groups involved at a distance ... of course it does involve other areas as well, Haematology Department for instance, because these patients invariably end up with Multiple Organ Failure, it is actually discussing with the Haematologists what the implications of having someone on renal support meant, because they would see us using vast volumes of platelets and things and thought it was the haemofiltration machine that was doing it not the patient's disease state (31) ... Patients and those close to them were also seen as stakeholders ... it is important to be clear to the consumer and to be clear to the patients who are being taken care of (3) ... and also involved physicians; ... I try to make myself visible with the physicians (10) ...*

Marketing was also seen to demonstrate Political Awareness, certainly within an institution it was necessary to be highly visible to be successful. Customers were seen to be patients, families, nursing staff, medical practitioners and hospital management ... *So really what the ... advanced practice person is doing is marketing. Marketing herself to her customers regarding what it is she (he) has to offer (8) ...*

Finally, in terms of Established Values it was clear patients were of the greatest value to the participants in this study ... *a patient care issue ... definitely it would come first (12). It was important that this focal point was demonstrated not only through speech, but more importantly through behaviour ... what you spend your time doing is what is deemed to be valuable - so you can't say that practice is important if you are not seen to be doing it. If you spend your time at meetings that is seen to be what you value, if however time is spent in practice, that is what peers and colleagues see you value (30) ... and from another participant ... I'm always very mindful of the messages that I give out, you know, when I work clinically, role modelling, in discussions, in meetings whatever I'm very mindful about that all the time and I think you have to keep, you can't really lose track of that because I think that people ... are very aware of messages that you're giving out and if you're one day saying well let's do things a bit different then it has a very powerful effect on people so that you've got to be very clear in your own mind about values and beliefs, what you think is important (32).*

In summary, the intervening conditions most likely to impinge on the exercise of Legitimate Influence were the macro processes of Conflict, Resistance and, in some contexts, Challenges. Structural elements involved a lack of understanding of the role demonstrated by hospital management. Individual attributes also had the potential to hinder role performance. These included issues of time availability, being over zealous and gender bias. Facilitative intervening conditions were reflected through the microprocesses of Overcoming Resistance, Political Awareness, Established Values and in some contexts, Challenges. The strategic activity undertaken to enhance patient stay and improve patient outcome will now be presented.

5:4:3 Strategic Conditions (Figure 5:4)

Strategic conditions represented interaction or action strategies which promoted the patient orientated categories; Enhancing Patient Stay and Improving Patient Outcome (Section 4:7:2). The identification of strategic conditions involved many of the concepts already established in the open coding section (Appendix 14). This demonstrated increasing integration of the various concepts which formed the foundation of the developing theory (Figure 5:4). The results of strategic activity are outlined as consequences in the final section of axial coding. *It was interesting to note that whereby constraining intervening conditions represented the macroprocesses associated with interpretive interactionism, strategic conditions pertained to the microprocesses depicted in symbolic interactionism. That is to say, much of the strategic activity identified provided evidence of working with and through people to achieve the consequences of advanced nursing practice in adult critical care (Section 3:3).*

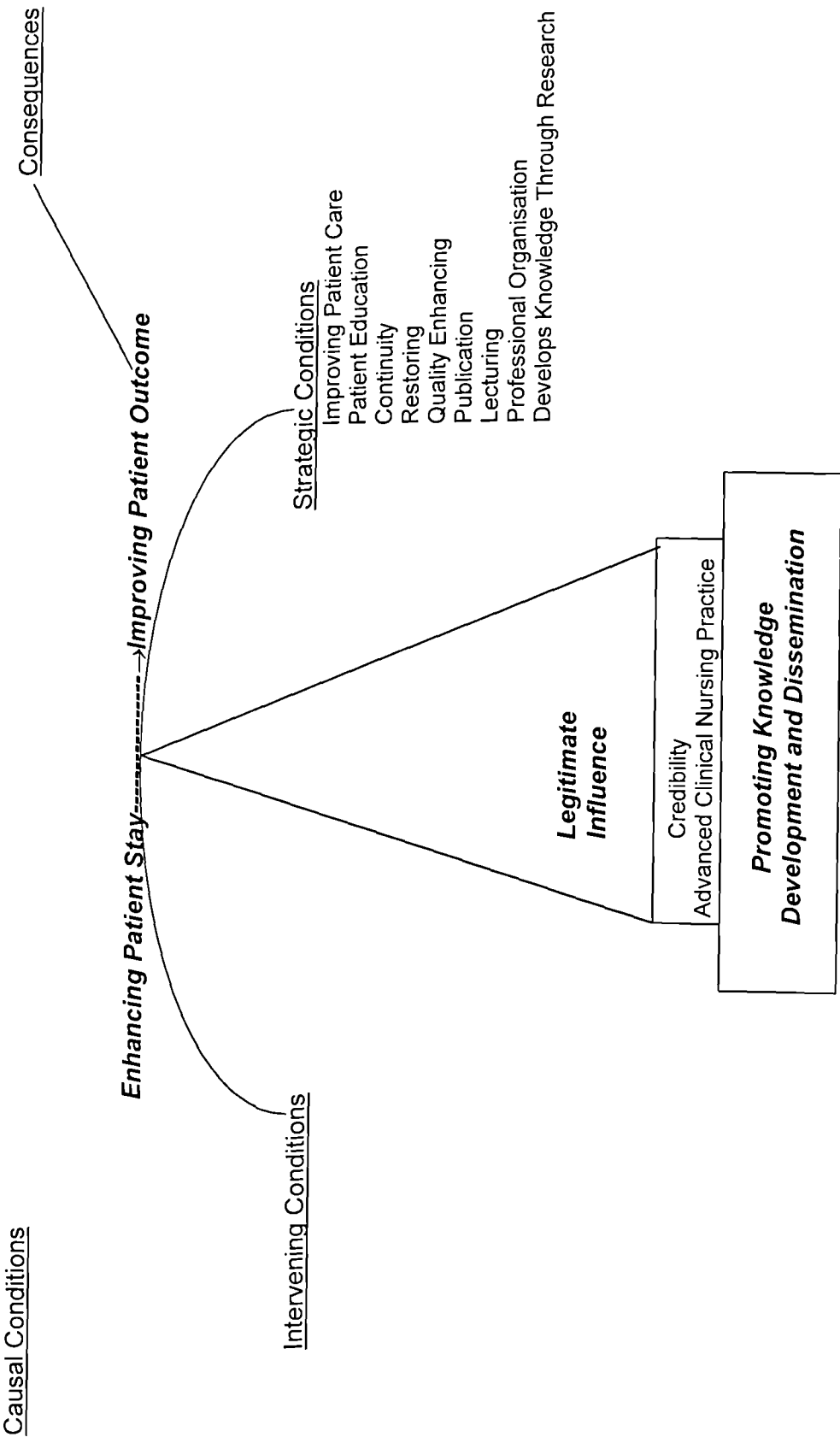
Analytical fieldnotes revealed several sub-concepts were found to comprise the strategic condition Improving Patient Stay (Appendix 14; Appendix 15 - Logic Diagram A). Some of these had been identified in the open coding section, specifically 'decreasing trauma and crossing traditional boundaries'. Later participants gave specific examples of reducing trauma, unavailable in the first set of data collected ... *I gave them many more options so that their outcomes did vary but usually it was one that they were comfortable with so the wound might have taken a bit*

longer to heal using plan B but it still healed but it was in their, their area of comfort so that they didn't have to go out of their way to do things (13) ...

The following example from the same participant also provided further evidence for the differentiation between the service offered by medical and advanced nursing staff, also manifest in the preliminary literature review (Section 2:3) ... *junior doctors, again I think they're very busy and they don't get the time, but I think a lot of time they prescribe care rather than discuss and give options and involve the patient (13) ...* Another example related to decreasing the length of time in the department, ... *updating the patient's care very frequently so that they don't have long periods of time where nothing happens to them because I think sometimes if you have long periods of time where nothing happens to them then their length of stay gets prolonged because you think oh I'll wait till tomorrow to do that then wait till tomorrow to do that then we'll wait till the doctor comes in and then we'll wait till tomorrow so suddenly their length of stay can be prolonged so in our unit we're very progressive(19) ...*

There were many more examples which provided supporting evidence for the 'crossing of traditional boundaries' between medicine and nursing, although this was the area where most conflict occurred (Section 5:4:2). As indicated earlier many of these examples related to patient management reflecting a collaborative, rather than a confrontational, style of interaction ... *I would have the HDU resident or registrar calling me particularly in regards to patients with traches (tracheostomy) because a lot of them are not skilled in some of those areas (15) ...* and from another participant ... *we have a very rigid protocol about asthma and its unusual to some people so if there are medical staff who are inexperienced and we have a serious asthmatic admitted overnight I would guide the medical staff on the ventilation for that patient and use the protocol as a backup and if they're not there ... and say the patient is gas trapping or there is something obviously wrong I would intervene (17) ...*

Figure 5:4 - Paradigm Model - Strategic Conditions



This diagram represents the inter-relationships between the causal, intervening and strategic conditions associated with the four categories which delineate advanced nursing practice in adult critical care.

It was apparent that boundaries were usually crossed with the aim of Enhancing Patient Stay, not to make up a short fall in medical presence ... *that's the thing, it's looking at what's appropriate in your unit, looking at the patient population ... OK so the junior doctors hours are being lowered, ... and it would be nice if we (doctors) could get rid of lumbar punctures is the thing which has been mentioned recently; they have to do a lot of lumbar punctures here because of giving intra-thecal drugs. Uhm, now I have kind of thought about and thought 'right, how is that going to help practices in ITU? It isn't', we don't often do that in ITU, uhm we do diagnostic ones, but, and I thought no, is it going to help, ... not really no it isn't'* (33).

However the same participant was in favour of performing tasks which would facilitate improved patient management ... *On the other hand I think that, I suppose what I have done is over the years I have thought 'now, what will it be useful to patients if I've learnt', not to make me look like a demigod or a mini doctor, because I am not interested in being that, for example I don't put central lines in. I have learnt how to do it in a previous job and I suppose if push came to shove I could, but I don't because I don't do it regularly and I believe that's not safe. However, because we do not have anaesthetic cover at night if there isn't an intensive care patient, because I am often on the cardiac arrest team, I felt it was important that I was able to intubate. I learnt intubation many years ago and I have kept the practice up* (33) ... The perception of many nurses working at an advanced level was summarised by same participant ... *you don't stop and think 'well it's not my job' or uhm 'oh well you know don't doctors do that' ... you know all these kind of boundaries ... are not real, you know just in peoples heads often* (33) ... as the ultimate focus was improving patient care ... *that has to be the ultimate driver because that's ultimately what makes everybody else comfortable with it, the fact that if we don't do this we're detracting from care and so it is that moving forward which provides the focus ... that your primary aim is patient care* (31). This delineation, associated with the crossing of traditional professional boundaries became a key component of the final discussion (Section 6:2:2).

Various other examples, of strategies used to Improve Patient Stay, were provided during the process of continuous comparative data collection and analysis. These were patient focused and included 'influence over patient management, effective communication with patients and those close to them and networking across the whole interdisciplinary team' (Appendix 15 - Logic Diagram A).

Contextual fieldnotes and interview data implied 'influence over patient management' took a variety of forms, including moving across specialities, damage limitation, writing protocols and direct participation. Moving across the boundaries of specific speciality areas participants in the study were used as consultants by other nurses ... *they would call me if they had a particularly challenging problem with their patient ... I don't want to take over what they do because some of them are actually a bit protective to, you know, that they're my patients and I can manage and I said yes you can that's fine and I want you to call me if you need help and I tried to say to them you know the doctors have consultants, they call consultants in who give them advice if they need it, that's what I want you to do with me if you need advice on how to manage a patient (25) ...*

Much time was also spent in damage limitation following changes in hospital policy which threatened the quality of the service provided ... *in their infinite wisdom they decided to give us fifteen cardiology beds down there in a ward staffed with new graduates and enrolled nurses who'd never seen a cardiac patient in their lives before and, I mean they were very upset about that so I spent lots of time down there, lots of education, lots of support but also the medical staff, and we have some very conservative medical staff, who were terrible to them, you know complaining about them not knowing what they were doing and you know really going for staff out of hours and I intervened directly on their behalf with those cardiologists and the Head of Department and you know they used to just transfer patients out the minute the smallest thing happened so there's this constant sort of triple shuffling of patients and you know in the middle of the night you'd be moving a patient out from stage eleven to stage nine so that you could get one from stage nine to coronary care and another to primary care and it was just a ridiculous waste of time so all of those sorts of issues you know I've been very much involved in (16) ...* It appeared, from this data, that the knowledge and skills required by nurses to effectively care for critical, and potential critically ill patients were often not recognised by hospital management ... *we'd just trained all of those staff and then they moved them over to another building (16) ...* This demonstrates the professional - bureaucratic conflict alluded to in Section 2:2.

Some participants were also involved in protocol writing, believing they were more likely to include nursing issues, which given the above example appeared necessary ... *I wrote the policy based on what the doctors had talked to me about and what the nurses had talked to me about so now when the nurses look at it they say oh that's really good that that's there because that's been a real problem for us ... I think that's important although some people have said to me that they think I shouldn't be doing these things, that I should*

be leaving those for the doctors to do but I think its important because again I think it benefits the patient and the nurses (25) ... Direct participation in the management of patients was also evident ... so he (Surgical Consultant) and I do that together with one of his juniors and I take one of the night (nursing) staff and one of the day staff. Basically we are looking at nursing and medical issues together and they go together anyway ... And then we look at their results, their care, their pain control, their everything else and we make the plan for the day (33) ...

Effective communication with patients and relatives was seen as a vital strategy in Enhancing Patient Stay and Improving Patient Outcome. Participants were aware of the effects of illness upon the patient and were prepared to listen ... *psychological support, you know, just letting them talk, particularly if they've had an episode of multiple shocks or whatever or they're very frightened, you know they'll just speak at length about things like that and the effect on their family (16) ... and attempted to provide understandable explanations based on an individuals experience ... they don't want to waste the doctors time ... nurses are more accessible, nurses actually speak a different language to doctors so they can understand them a lot better and nurses tend to look at the individual rather than the complaint (13) ... and another participant ... but I often find that people will, if you can sit down away from the unit, maybe go to the coffee shop or you know wherever, a bit more private, you can say things in a way that they are not taken over by the technology. It is frightening ... and (relatives) ... 'you know, I didn't understand when they said this or said that and then this happened and ...' you know you can sort of say 'just let me explain this, it does make sense and I will try and make it make sense for you'. You can have those sort of conversations (33) ... and this was associated with the need to decrease confusion and enhance the understanding of patients and those close to them, identified as consequences of Legitimate Influence (Figure 5:1).*

Networking occurred across the whole interdisciplinary team (Appendix 15 - Logic Diagram A) ... *with the cardiac rehab, the OT, the dietician so if we can work as a team together we should achieve ... better informed patients and hopefully better outcomes (23)...* with the aim, again, of Improving Patient Stay ... *I work very closely with the interdisciplinary team daily, its fantastic, its the best part of the job, this conversation that goes between each discipline about what they can do for the patient, you just see it growing in front of you and you can see the patient moving (29) ...* The evidence base for practice was also seen to be an important feature of networking ... *that's right so getting the whole team together and making sure that we are doing the right thing, that we are adopting*

the best practice (23). In some instances, advanced practice nurses were referred to one another by medical staff on a consultative basis ... one of the staff specialists here is interested in it, so he asked the Respiratory Clinical Nurse Consultant to contact me (because) he knew of our network and ... what our scope of practice is (12) ... However, not all medical staff were so proactive, only appearing to think of advanced practice nurses if they had a problem ... I think that on a day to day basis, the other (medical) consultants don't really ... consider what the CNC's doing or what we basically do but I think that if there are problems ... that's when they think about what we can offer (12)... and other participants ... when the staff specialists have an issue with clinical management ... they come to me ... I just think its now that they're starting to realise that if they want things to change or if they want things done ... or if they want something corrected perhaps then the CNC's are probably the best person to go to (12) ...

Participants were also used on occasion to develop other professional groups and this aided the networking process ... *(when) the new doctor starts I actually orientate them for a while (12) ... but the rotation of junior medical staff altered the dynamics of the interdisciplinary team ... I'm thinking back again to the tracheostomy patients, and I ended up working very closely with the speech pathologist which was fantastic, as well as the dietician ... and the ... ENT registrar and we had this team actually happening with the patient, now unfortunately its a new year ... so we have a whole lot of new people coming through but we need to try and re-establish that again because it definitely benefits the patient (15) ...* It was evident that the advanced nursing practice role appeared as a consistent presence, especially in relation to the rotation of junior medical staff. The advanced practice role emerged as pivotal in effecting effective interdisciplinary networking and improved patient outcome (Section 5:4:4).

Patient Education continued to be a key feature throughout data collection and analysis and expanded to include those closest to the patient. Open coding demonstrated the focus of Patient Education was health promotion and risk reduction (Appendix 14 - Figure A). Further theoretical sampling revealed advanced practice nurses also instigated the development of educational material ... *my role is going to be to co-ordinate the production of our own material ... the neurosurgeon ... he gives them the projection, what I see as my role is teaching and you know ... understanding ... the tumour, where its located, what sorts of symptoms to, explain to them what to expect, how do they deal with those symptoms and ... again along with the social worker I look at how to cope with these symptoms, how will they tell their families you know just practical every day,*

... and you know that's a big part of my role ... education (24) ... and another participant ... One of the things I've just done recently is recommence the 'in patient' cardiac education programme (25) ...

In some of the clinical areas it was apparent that separate 'nurse educators' were also employed. Contextual fieldnotes indicated a possibility that role blurring might occur, especially in relation to the more 'indirect' care giving roles such as the CNS and CNC. However role delineation was made quite clear by one of the participants, and again emphasised the focus on improving patient care and outcome ... *so if people ask me you know what's the difference between me and the educator I always say well if its a staff issue its the educators concern and if its a patient issue its my concern (25)*. This might prove to be an important delineation between the role of the Lecturer Practitioner or Clinical Educator and Advanced Practice Roles. Lecturer Practitioners would be involved in teaching the knowledge, skills and attitudes related to the speciality such as the management of respiratory failure or haemodynamic manipulation. The advanced practice nurse would educate nurses about the issues related to, and which have been fed back from, the patient population. Contextual fieldnotes suggested these might include the need to maintain continuity and consistency of nursing care or review of the evidence base associated with certain areas of nursing practice in adult critical care.

Various strategies were outlined which contributed to Continuity of Care (Appendix 15 - Logic Diagram A). Predominantly it was important to perceive the patient as a 'whole package' and as a key participant suggested (Appendix 9:11) this provided stability and promoted the "essentially personal relationship" referred to during the process of gaining theoretical sensitivity (Section 1:3) and in Logic Diagram 1 ... *I usually see them quicker and quite often because I deal with them from entry to exit so that I will organise the tests and ... and look at their X-rays and organise their after care, rather than expecting other people to ... do that, I can make their stay a lot shorter ... the whole picture of ... you know ... ongoing care rather than just saying you need to have this followed up in three days, and I tend to look at how they're going to manage the follow up and where they're likely to go and do they live locally, you know, sometimes patients are told to come back in three days for review but they might live fifty kilometres away ... (13)*.

Particular emphasis was placed on 'following the patient through the system', as indicated in the open coding section (Appendix 14) and again in Logic Diagram A (Appendix 15), ensuring patients continued to progress with recovery ... *I mean it is obvious that these patients shouldn't have ... become as ill as they had or even died for that matter, I mean there are obvious problems in ... the fact that they are getting mis-managed and they aren't sort of being ... properly followed up (14) ...* As the text extract demonstrates patients may not recover if continuity was not maintained and this problem was raised by other participants ... *well I think some of the biggest impact I actually have on patients is ... not necessarily when they're in intensive care, though I do go and review the patients, but ... its more when the patients are actually ... transferred out, especially to the high dependency areas or to the ward areas, that I try and follow each of those patients up, especially if they're still quite complicated ... because historically there have been quite a few rebounds back from the ward areas or the high dependency areas back to intensive care so the aim there or part of my role I would see is ... trying to follow the patient through so its that continuity again and I think that that does impact on the patients stay (15) ...*

The period of time over which a patient was followed up varies. Where patient throughput was predictable (e.g. cardiac surgery) advanced practice nurses became involved in pre-admission clinics following through to discharge ... *I do a preadmission clinic, I also see the inpatients who're referred to the surgeons, follow them through hospital, not so much in Intensive Care, but as soon as they come back onto the ward and then I'll see them the day that they're going home ... and then I give them a follow up phone call sort of anywhere between three to five days (23) ...* Some advanced practice nurses followed up all patients ... *what I usually do is a round each morning just to go and ... eyeball the patient and you can tell a lot by just actually physically looking at them and hearing a bit of feedback on how they're progressing. I would tend to continue to follow the patient from intensive care to high dependency and while they're given the status of ... high dependency ... I would continue to stay in touch with them but not necessarily do a thorough assessment of them each day(18) ...* Whilst others concentrated upon high risk patient groups ... *because a number of patients are trauma patients and they often have a traumatic intubation on the side of the road, for them to have upper airway problems post extubation is not a rare event. So I always let the staff know in the ward that I want to do the extubation, not that its a highly skilled thing to extubate someone but if they need reintubation ... you can't have a novice that's trying to find that tracheal track. So I take them right through to extubation and check that they're managing spontaneously, breathing without an artificial airway and*

then I sign them off (28) ... Or for a minimum number of days... I tend to spend more time of my day outside of the unit in a follow up programme that we've developed for the intensive care unit and that involves reviewing patients that have been specified by certain criteria and we follow those patients up for a minimum of five days and during that five days ... they would ... be brought back to the unit, should I detect ... any deterioration ... the impact on the patients stay in hospital here is hopefully to see them progress to the wards very smoothly and then follow them up to make sure that things that need to get done for those patients are getting done considering that we've got a young, fairly young population of staff here that have got very junior experience (26) ...

Contextual fieldnotes demonstrated several issues which arose from the strategic conditions identified above. The presence of more junior nursing staff and health care support workers on the wards compounded by the inexperience and rotation of junior medical staff indicated the need for advanced practice nurses to follow patients, who could potentially develop critical illness, through the complex bureaucratic system which is today's hospital. It might be expected that problems would arise if nurses in other departments perceived the 'follow up process' as covert criticism of care delivery in their department, however no participants stated this was an issue for them, indeed quite the opposite ... *It's well accepted, it's asked for a great deal of the time. Once I think they've got to know you they realise that you're not doing it going in and saying 'look how did you do this so abysmally', you actually go in saying, 'look there is an obvious problem, lets talk about this, what are we doing that we're not helping you as the patients leave. Do you want us to come up?' (31) ...* However, sensitivity to the issues facing ward staff needed to be demonstrated particularly in relation to inexperience or a shortage of experienced nurses in a particular clinical area.

Restoring critically ill patients to the best possible level of individual function continued to be emphasised by participants, during the process of constant comparative analysis... *Yes I think, I suppose to me that's how it's sort of ... changed me over the last couple of years, it's sort of developing that broader view ... to see how we can help those patients when they leave ITU or prepare them before they come in and to make transition, to make the sort of experience they have to go through, if they could, all recover from it when they go back to wards and then thinking about when they go home and what are we doing in everyday activity care for the patient in ITU ... there's lots of things there that we can do to make that transition for the patient and family smoother (32)...*

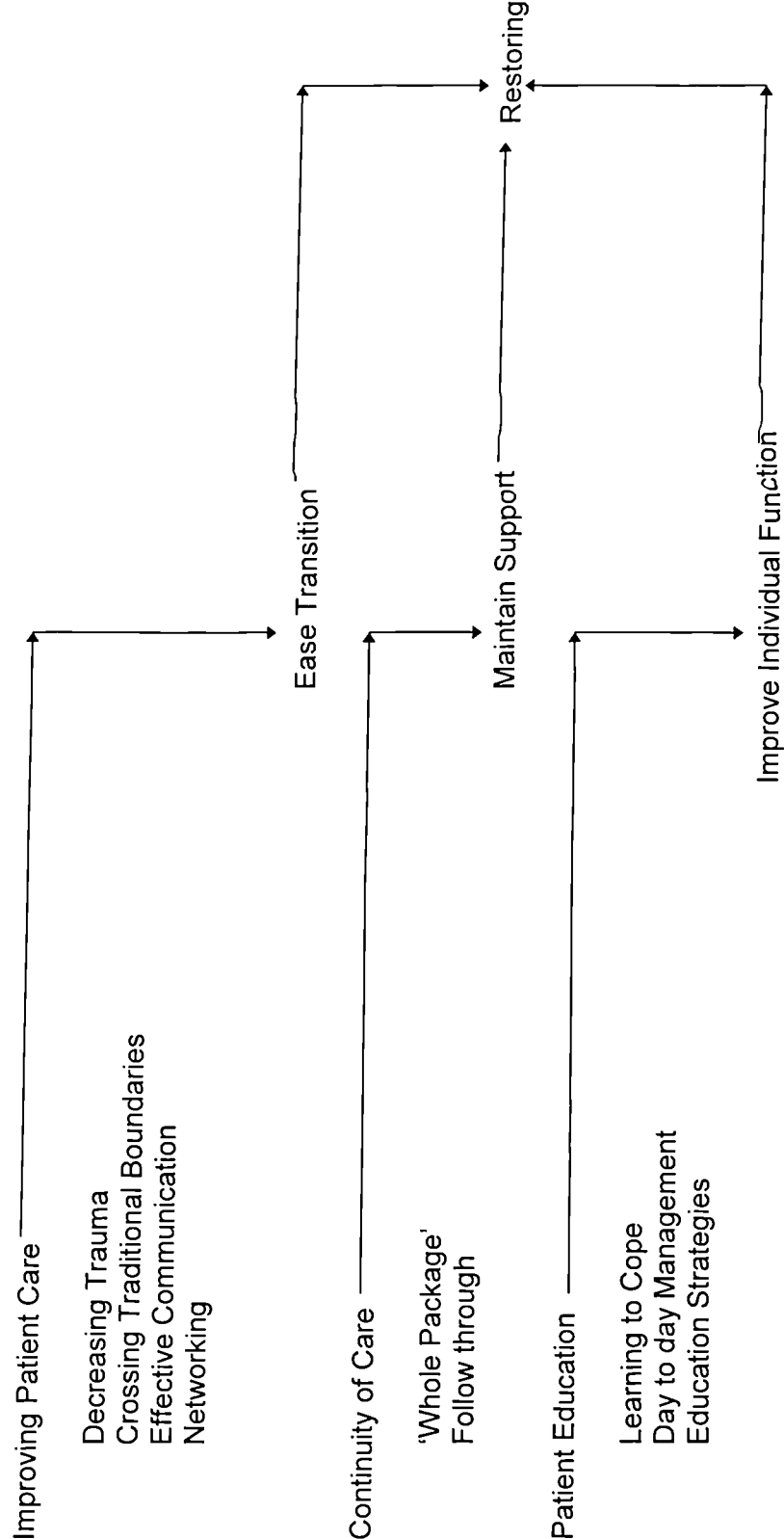
Practical examples of Restoring were evident in contextual fieldnotes and included reducing the amount of confusion patients felt moving through a system which lacked familiarity, also identified during open coding analysis (Appendix 14 - Figure B), and reducing feelings of dependency following critical illness, especially dependency upon technology ... *So when I wrote this policy I wanted to make sure we set something in place so that we'd know in advance that we could send these people to the ward if they needed the bed and then what I've always done in that situation with the patient is go to the patient and say you don't need this monitor anymore, take them off, they're still on the unit, they don't need the monitor because if they needed the monitor they wouldn't be able to be transferred and then say to them you know you're going to be going to the ward at some stage, maybe tonight or tomorrow, depending, if we need the bed you might go tonight but other than that you'll probably stay till tomorrow but you know you're doing really well, you don't need the monitor anymore and then they accept that a lot better (25) ...* Individual patient needs and increasing patient independence were also considered ... *because the ITU nurses rotate to the HDU they still treat them as an ITU patient with all the monitoring. So what I'm saying is we recognise this about sort of shifting them to think 'how can we start preparing our patient' and then discharge them to the wards, getting them doing things for themselves (32) ...*

Support was maintained following discharge from hospital in some instances through the use of business cards ... *what I've tried to do just even by giving patients families a business card just to say you know call me if you, if ever you have any questions (24) ...* and through the mobilisation of community support ... *keeping them out of hospital, managing to keep them in the community or keep them at home with community support ...* A key participant (Appendix 9:8) suggested, in referring to Logic Diagram 1, that the advanced practice nurse 'peel off' at the point of discharge from hospital. However, the verbatim text associated with Restoring indicated that some advanced practice nurses remained in contact with patients once they have been discharged. This may be a function of chronicity. That is to say, if the advanced practice nurse is dealing with patients who have a chronic problem, such as left ventricular failure, they maintained contact as a supportive measure. If however, the problem which required adult critical care was acute it was probable that the processes associated with Restoring ceased at the point of discharge from hospital.

Restoring patients to health indicated the activity undertaken to ease transition through complex health care systems, reduce confusion, increase independence and maintain support, ensuring continuity of care was evident. The strategies which eased transition were depicted in the strategic condition, Improving Patient Stay, and included decreasing the trauma of hospitalisation, crossing traditional boundaries, influencing patient management, effective communication and networking with the interdisciplinary team. Other strategic conditions, cited above, were also integral to Restoring, these were Continuity of Care and Patient Education. Continuity of Care underpinned the maintenance of support during hospitalisation and following discharge, by ensuring patients were perceived as a 'whole package' and followed through appropriately. Patient Education sought to enable patients in learning how to cope and provided information concerning the day to day management of individual health related problems utilising innovative educational strategies. This process was summarised by the following Logic Diagram.

Participant observation and contextual fieldnotes demonstrated that the strategies used to enhance Quality related to feedback from the patients themselves, nursing staff as a peer group and factors associated with raising the profile of the institution. Member checking revealed a concern (Appendix 9:13) that Quality may be subjected to an interpretation of both poor and good. It was evident from the data and the category definition of Enhanced Patient Stay (Section 5:3) that participants were striving to deliver the highest quality service, utilised patient feedback where possible, reviewed follow up services and demonstrated a Focus on Outcome (Figure 5:1).

Logic Diagram 3 - The Strategic Conditions Which Contribute to Restoring



The following text extract demonstrated the process of quality enhancement was usually achieved through the development and maintenance of standards and protocols, integral to which was the personal demonstration of quality by the advanced practice nurse through the direct delivery of a particular aspect of care or by ensuring nursing staff were provided with the prerequisites necessary to deliver high quality care ... *the maintaining of quality standards and ... maintaining perhaps with the logistical ... method of getting them through their stay with the best possible care and quality of care so ... from that point of view I would see that my role would sometimes ... be hands on and sometimes will be in regard to making sure that the staff, who are providing the care have the appropriate background to do that, have the abilities to do that, have the equipment and services they require to do that and then to make sure that the patient did in fact get the appropriate standard of care and if they, if there are patients ... who require a particular need of care then I would see that that's my role to provide it and to either provide it myself or to make sure that the person who is looking after them could provide it (20) ...*

Improving the profile of an institution was also seen as enhancing Quality ... *make an institution ... grow if you like so, through research, you know, the infrastructure, setting up infrastructure research, ... networking with other institutions, teaching, running conferences you know that sort of thing. I think they see us as valuable in that way because we're improving the profile I think they see it as a quality issue (12) ...* Again this demonstrated the importance, raised earlier, of making the contribution made by advanced practice nurses visible at the administrative level.

As depicted earlier, in the open coding section (Appendix 14), Patient Satisfaction with the delivery of particular services was often used as a criteria in evaluating the quality of a service (Section 5:4:4). Feedback from patients was seen to be powerful both in terms of the impetus to change practice and increasing the motivation of nursing staff ... *ensuring clinical standards are appropriate ... in terms of innovative and strategic ways to change practice, to motivate, enthuse and excite nurses thereby providing a better service, ... look at technology to see how it may improve patient stay, comfort and outcome, ... impressions of the patient's stay, ... impressions they have of the hospital, of the profession, of the service that's been offered, that certainly, consultants can have an impact on (26) ...*

Analytic fieldnotes indicated that the broad perspective taken by advanced practice nurses and their focus on patient populations (Section 5:4:1), rather than a particular geographical area within a hospital such as an Intensive Care Unit was also apparent in relation to enhancing Quality ... *impact on patient stay is related to promoting standards of nursing practice and I believe it has to have a significant impact on not just intensive care but ... establishing follow up services (28) ...* The importance of empowering nurses and valuing their contribution was also an important factor in enhancing Quality ... *we have two follow up services, one run by the nurses of the department and one post transfer from the hospital. A telephone interview is undertaken and they are asked about their ongoing health problems and asked about the quality of their care while they were in the department; and the other one is where the next of kin are contacted four to six weeks post discharge and again its a structured telephone interview hopefully identifying problems they had and the quality of the support and the level of that in the department and the feedback from both of those services, because once these are set up, ... hearing the responses, its been very powerful for staff nurses here. They become very motivated after the interviews, numbers, data that came back and any recommendations they make, the management team implement as quickly as possible. So that has been significant (28) ...*

Participants continued to support the importance of Publication, Lecturing and active involvement with Professional Organisations, throughout the process of data collection, theoretical sampling and constant comparative analysis (Appendix 14 - Figure C; Appendix 15 - Logic Diagram C). What became increasingly apparent was the emphasis placed upon the development of knowledge through research. All facets of research utilisation were evident - evaluating current research for practice ... *it is quite interesting, we would say do a bronchial lavage in the morning and then send it off to microbiology which they didn't actually then plate it up until about 4 in the afternoon. Now I'd been doing some research into the background of this and how much fluid should we use and is it effecting everything else and in so doing actually came across another article which said how when something's in normal saline it effectively would become useless in the space of 2 hours. So I contacted the microbiologist and we drafted up a standard of how it should be done (31) ...* demonstrating a link between research utilisation and quality enhancement. Direct involvement in the research process was also apparent at a local level ... *we're going to implement some new research to change clinical practice which is based purely, at present, on just some unfounded clinical work to see if we can actually start to generate evidence based practice (12) ...* and at a national and international level ... *I also think it is my job to make sure that we are involved in multi centre research, international research (32) ...*

However, it was also evident that although research can be 'multi centre' it was not as yet common practice to undertake interdisciplinary research in adult critical care ... *the doctors are doing their own research, getting their own funding and doing lots of things, but there is also for me a lot of nursing (research) recently which had been done, very focused but again there is no pulling together of that research, there is no sort of (research) agenda for the adult critical care of patients (32) ...*

The strategic actions and interactions undertaken in Enhancing Patient Stay and Improving Patient Outcome have been portrayed. The emphasis placed on patient orientated activity; Improving Patient Stay, Patient Education, Continuity of Care and Restoring, revealed the Established Values of the participants in this study, identified earlier as a facilitative intervening condition (Section 5:4:2). The professional activities associated with the development and dissemination of knowledge, such as Publication and utilising or undertaking research were strategic actions which underpinned the exercise of Legitimate Influence (Figure 5:1). The strategic elements outlined above were essential and distinguishing features of advanced nursing practice in the care of critically, or potentially critically, ill adults and were necessary to achieve enhanced patient stay and improved patient outcome.

5:4:4 Conditions of Consequence (Figure 5:1)

The consequences of the activities and behaviours delineated within the causal, intervening and strategic conditions above completed the process of axial coding (Figure 5:1; Section 4:7:2). In identifying the consequences of advanced nursing practice those relating to patient stay and outcome:- Increased Patient Satisfaction, Independence Enabled, Trajectory of Continuity, Prepared for Transitions and Clear Understanding - maintained a consistent presence within the data and were given priority within the paradigm model (Appendices 14 and 15). The rationale for this was that Legitimate Influence was primarily patient orientated and is used to enhance patient stay and improve patient outcome, as stated by one participant ... *I thought you know hang on that's what my existence is, my existence is justified every day and ratified every day by the fact that I know I've had an impact on these people ... for me that patient contact and knowing that I'd done a good job, the best that that I can do, that I've given them optimum health care and that they're happy about it and that they're safe (33) ...*

The consequences of Legitimate Influence being apparent, in terms of peers and profession, comprised collaborative practice and high visibility.

High levels of patient satisfaction were an important focus and consequence of the advanced practice role as perceived by the participants in this study ... *I undoubtedly believe in the patients satisfaction (22)* ... Association with previous causal and strategic conditions was evident. This was demonstrated in relation to the causal condition 'Focus is on Outcome' ... *patient satisfaction I think is a huge measure of outcome (13)* ... The strategic condition 'Quality Enhancing' and sub-category 'negotiation' were also linked with satisfaction ... *certainly we have demonstrated an impact on patient satisfaction ... quality of care issues ... and ... the patients are our consumer and they are also somebody that we have to negotiate with a lot (1)* (in order to achieve satisfaction). Also, aligned with the involvement of the patient was a commitment to change services in order to meet patient expectations ... *our heart surgery programmes, you know we increased the numbers by almost between 20 - 25% ... changing the way we did things and helping patient satisfaction (6)* ...

It has already been acknowledged that enabling the patient to move from dependence to independence required Patient Education. However, further criteria were identified which were indicative of advanced nursing practice in adult critical care. Firstly an emphasis was placed upon psychological as well as physical improvement ... *its also reassuring that a lot of the funny little feelings that they've experience ... even down to just having a funny feeling on the left side where the left internal mammary artery' has been used for a graft um, a lot of them don't want to say but that left side does feel different (18)* ... Acknowledgement of the difficulties faced by patients led to innovative approaches to current practice in enabling independence ... *a lot of people were ringing us and asking us what they could do next and we would say that you know you could go to a gym if that's what you wanted to do, a lot of people didn't want to do that so we did another survey, talked, looked back at other people and said that if we'd offered some sort of ... maintenance type programme, would they have been interested and they said yes and the reasons that they gave were that we knew them and they felt a bit safer, they weren't ready for a mainstream gym yet so they wanted to actually be a little bit less er structured but still be able to have the nurses there that they knew. So (we) set up a phase three maintenance programme (25)*. Innovation, aligned to patient wishes rather than professional aspiration, was also apparent ... *What epitomises my practice is the making of a system to support non traditional care. We have several vent dependent patients in our ICU that wanted to go home on the technology, or at least live in another place*

outside the ICU. I championed the change to move them to a rehab facility then home (a first in our region), and another moved to ... shared community housing ... constantly stimulating the conversations of patient wishes (40) ...

Another major criteria associated with enabling independence was to include patients in the decision making process ... *include the patient in decision making about their care ... rather than saying you will do this and this or this is what I tell you should do ... so I include them in decision making which gives them ownership, which makes them feel much more comfortable which I think has an effect on outcome, just psychologically they feel ... more in control (13).* This included decisions concerning the strategic condition Restoring ... *the three young men I've had in the last two years have had major trauma, urethral injuries they've rung us, the trauma service to ask us about impotence and about those problems because they didn't feel that they could talk to anybody else and indeed we put them on the right track, that's a service we offered them before they went, if when you get home you find that your pecker doesn't peck give us a call and they say things like for instance oh will you come on round and do, no I will not but ... that's the difference you make to the outcome and that they feel empowered to actually carry in on in their own rehabilitation, they know the path they're going down, they can ask questions as well so that's what we do, we involve them all the way with the decision making (29).*

However participation in the decision making process, although enabling independent thought and action, did not always lead to Restoring, it also included treatment withdrawal decisions ... *we'd got this lady weaned where she could say, this is over a process of about 3 weeks, she was otherwise fit so she was absorbing food and the rest of her body functions were okay ... she was obviously very keen to get out of the unit and preferably home, this one lady, and obviously we said the chances are it's going to be very difficult for anyone to feel comfortable with letting you go home because of the nature of your breathing that ... even on the ventilator for support is only very very shallow ... and in the end over a process of over four or five days in conjunction with her husband she said well reality was that she'd got very little quality of life at home any more anyway because she couldn't walk across the room and even eating a meal was quite arduous because she had to keep pausing for breath in-between and that because she'd had a few days she and her husband had talked about things as well and thought that no, she needed to come off the ventilator and go home if she got home great but if she didn't there was no way she wants to be reventilated realising that this was the end for her ... it is fairly novel I think at that stage to actually involve the patient and the relatives so much in that decision process (31)...*

Enabling independence was also integral to a focus on the trajectory of patient stay and following discharge. It also represented a broader holistic perspective than the economic indicators outlined earlier under the criteria identified for success (Section 5:4:1) which were frequently used to measure outcome ... *I mean a lot of the times when they talk about outcomes that that's all they talk about is the decrease in length of stays ... and I don't think that that's the same thing but ... if we're saying outcomes are sort of the patients long term use of health facilities or how they recover from the illness and their quality of life then I think we do make a difference because, again going back to the ability to be able to move between different areas and follow the patient through all the way through you do develop a bit of a relationship with them but also you're able to see the things that were important to them at the beginning whether those things have been met and how it might have changed and then chase them up at home and make sure that everything's going the way that they thought it would (25) ...*

Establishing a Trajectory of Continuity which spanned the patient's individual perception of recovery was a sensitive indicator of the advanced practice role in adult critical care. This was demonstrated under the strategic condition - Continuity of care *where the importance of dealing with the patient as a 'whole package' and ensuring follow through was emphasised.* The consequences of this activity related to achieving a streamlined process of care and the provision of continued support. The provision of a streamlined process of care was a key measure of advanced nursing practice *in adult critical care, whether this was provided directly (NP) or indirectly (CNS/CNC) ... I also think that the role is really important in general terms of continuity of care within the unit. I think that the greatest difficulty in a lot of centres ... is that the patients feel a little disjointed and that shift work is never ideal. It is what we have now, but it doesn't lead to continuity. I believe that this role is really the key to continuity (3) ... and from another participant ... try and streamline the whole process so that not only are they looking at care in the department but they're looking at the whole continuum (12) ...*

It was also appropriate to evaluate the extent to which patients felt supported and were aware of the continuity of care provided by the advanced practice nurse. If possible this should be apparent in the preparation of the patient for the event which required admission to a adult critical care area ... *Some of the more common things are really just reassurance that what is happening is OK, that what is happening is nothing to worry about ... remember this is what I mentioned before surgery, this is very normal it happens to a lot of people (18) ... and also the extent to which patients felt supported once they were discharged from hospital. This took*

the form of a follow up phone call and continuing care if required by the patient ... *I'm always there, and they've always got my card if they need to ask me anything (21)* ... and there was evidence that patients who were offered this type of support did make use of it and that the service provided was qualitatively different from that provided by medical staff ... *A lot of people have said that, well people that I've phoned so far think its great, you know that they've got somebody that they can call upon and they find that if they ring the doctors they're given the run around whereas if they just ring me they get the answer straight away, if there's any problem I know who to contact so its been a useful resource for them really so far (23)* ... This degree of support may reduce the incidence of deterioration in a patient's condition ... *I was the person they contacted, they knew they were having problems, ... I think they needed to know that it is OK and who they should go and see ... so that it is good to know ... they felt they could contact me and say, ' I'm having trouble (18)* ...

Another feature of advanced nursing practice in action was evidence that the patient was prepared to make the necessary transitions towards recovery, or to a peaceful death. The strategic activity associated with this particular consequence of advanced nursing practice in adult critical care was identified previously as Restoring and comprised: Improving Patient Stay, Patient Education and Continuity of Care (Logic Diagram 3). Further evidence of these conditions were: established education programmes and care pathways which reveal the steps associated with patient recovery; the recognition of patients with special needs; the provision of options and the avoidance of complications which linked transitional variables with the following consequence - Increased Efficiency. Examples of programmes which eased transition were ... *together with one of the surgeons and put together a very nice programme for patients here so that everything runs very smoothly ... saw that it was possible and has made it happen now in cardiology (1)*. Factors which were associated with the ability of the patient to make transitions included ... *whether its respiratory care or intravenous or nutrition, whether they are able to get out of bed, weight bare, what their mobility is like, what the Glasgow coma score is like so you get a ... pretty raw picture of where the patient is in the recovery phase ... oversee that care that it's moving in the right direction and patients aren't getting left with a trache for weeks because they don't know what to do next ... I make sure they've got a plan of what to go by, that they can contact me anytime and I visit on a daily basis (28)*. Patients' special needs were also taken into account ... *Patients like older adults who are hospitalised, hospitalised patients with disabilities, patients who have any number of psychiatric disorders, children or pregnant women. People like that all have special needs when they come in to the hospital and I don't think*

that those special needs get addressed frequently, except by nurses(1) ... The identification of individual goals held by patients, (associated earlier with High Levels of Patient Satisfaction and identify patients' needs over time a property of the causal conditions - Whole Trajectory of Patient Stay is Seen as a Priority and Focus is on Outcome) were also addressed.

An emphasis was also placed on ensuring patients do not develop complications, which would limit the patients ability to make transitions. This revealed a link between the strategic condition, Quality Enhancing, and the following consequence Increased Efficiency. It involved influencing the focus of nurses directly involved in patient care ... *we're looking at ... the pressure area assessment hospital wide, but what I've done is I've looked at that data and ... what I'm trying now to do is to get the nurses in the intensive care units to think that that's a priority for them ... because sometimes they have a feeling that, not all of them but some, ... its sort of a low low priority because you know they're saving that persons life ... But I mean what I try to do is educate them and I don't think they realise that that person has a pressure sore and in healing it they won't be able to walk ... and ... we're trying to get them to just think as well that you know the earlier ... the catheter's taken out it will be better chance of control on down the track (25) ...*

Increased Efficiency was seen to be an important, if narrow, economic variable as well as one which contributed to patient recovery. The measures for this condition were decreased number of ventilator days and length of stay, this may be as a result of indirect influence ... *I think that we have certainly developed ... a group of nurses who are skilled and knowledgeable in regard to ventilation and we've had a big impact on our ventilation hours and our length of stay because of the processes that the nurses can all put into place in regard to weaning patients and ... optimising ventilation in the whole so I think that is something that we've done and we've actually ... proven that through our research ... so I think that's sort of an impact that we've definitely had on the patients ability to get through the ICU (20) ..., or as a direct effect ... in my practice ... I'm reducing the amount of bed days ..., I do attempt to relieve the bed blocks that occur within the wards, and I free up areas within the emergency department that would otherwise previously been taken up by patients that needed a simple trache change (26).*

The extent of readmission to intensive care units, and avoidable fatality, was an issue which concerned the majority of participants ... *there is a ... readmission rate ... but there were actually patients dying ... so really readmission isn't the only indicator (14) ... Priorities for action lay in identifying problems associated with readmission ... a lot of the system had problems obviously*

the resources were inadequate ... the education and the support they (the ward nurses) had been provided with was very flimsy and totally inadequate (14) ... A specific example was provided by another participant ...so I was paged to come in to help because they did not know how to hook up the right equipment and the physicians didn't either. So when I came in and we found that the patient had actually been bleeding and when we connected the pressure we found it had never really been up high enough to maybe have been successful. The patient died later. I look back and I'm thinking what was the potential consequence, could it have been different, if they had called me earlier (3) ... A proactive response to patient orientated problems was evident, which would be expected from nurses working at an advanced level ... I did an extensive needs analysis ... making sure of course I involved all the stakeholders in the process and I came up with a number of strategies about how we could address these problems ... there were extensive proposals drawn up (14) ... and the readmission rate reduced ... the results had certainly improved in terms of readmission rate to adult critical care areas ... and the fatality rate had reduced. This was emphasised by other participants in the study ... now that's the main focus of my role, that's the thing that really for me measures what I do, what counts for me is that they don't bounce back again (14) ...

It was also important that a Clear Understanding of illness and recovery was demonstrated by patients and families, which promoted feelings of control and responsibility ... And it has been a good thing, a lot of the nurses have come back and said that this is a smart move that we have made, the process goes a lot better, patients know what to expect and what is expected in the hospital (6) ... resulting in ... I think in the end what I hope the outcome is that we have people who understand their condition and then can care for themselves or their families can care for them more appropriately (24) ...

The effectiveness of collaborative practice was also apparent. The importance of establishing interdisciplinary team networking has already been identified as integral to the strategic condition - Improving Patient Care. Often it appeared a stepped approach was necessary to achieve this consequence ... *my goals initially have been to have the best nurses, the best trained nurses for the patients, and getting them to the place where they could function very independently without you being there and that they could implement and make decisions and critically think; work with the knowledge base that is required for the patients (3) ... Later emphasis was placed on the whole team ... so I think in terms of outcomes, when we talk about outcomes we are equating it to our service, how does our service end up with this outcome and if I*

want to change that outcome then I've got to look at the whole service and not limit it to simply my view of the world as nursing but I need to have a team that's prepared to work with me on that and ... that just makes the battle easier or ... enjoyable and fortunately I've got a setting where the team work is considered a high priority and its enjoyable, its not a battle (27). So an early measure of effectiveness would be that nurses were respected by other members of the interdisciplinary team, ... *There is respect for nurses and the attending physicians set the tone as well. The attending physician who orientates the fellows every year, usually makes a point of saying these nurses surpass the experience of all of us and if you are in doubt ask the bedside nurses and they will tell you (3).*

The end result may be informal ... *we have a philosophy here that we're all a health team in the department (12) ... or formal ... We have a multi-disciplinary council and I really work off what comes out of there in terms of what things we need (9).* This implied collegial relationships were evident ... *Outcome is that I am well respected by nursing staff, by my medical practitioners, and by other medical practitioners Examples - some of the internal med. docs ask me questions like which stress test should I order for this patient, GI consultants use my progress notes to do their consult because I've already worked up the problem before writing for the consult. Nurses (and other docs) read my notes to find out what is happening with a patient (37)...* always with the focus on Improving Patient Outcome ... *with the cardiac rehab, the OT, the dietician so if we can work as a team together we should achieve better, better informed patients and hopefully better outcomes (23)*
...

The consequence of 'High Visibility' was the degree to which advanced practice nurses were used as a local resource within a particular hospital and also at a more national and international level, as conference presenters and having work accepted for publication. The local effect to be observed was the use of the advanced practice nurse to help nurses identify patient response to illness which was outside the normal presentation of a particular problem, and this related back to the property underpinning the category Legitimate Influence - advanced clinical nursing practice (Section 5:5:1). Examples of this were acknowledging the need to act as... *a hospital resource and, besides having a speciality of intensive care and high dependency, know that other areas of the hospital may need me (15).* Use as a resource was identified as a key feature of advanced nursing practice in adult critical care by participants in this study ... *I think one of the hallmarks ... is how you get your consults (8).*

Advice was also requested by other members of the interdisciplinary team ... *they all know who I am and that I am the Nurse Consultant and they do, you know, if they have problems ... particularly on the wards they'll say to me oh you know er ... we're not quite clear what we should be doing in this situation, the medics, some of the medical staff say this and some say that, you know, when we started doing the defibrillator tests they weren't quite sure what sort of protocol they should follow, so they do come to me with those sorts of problems (16) ...* Associated with this was the need for documentation to be easily retrievable ... *Her documentation should be in the chart on a parallel place with the physicians ... she (advanced practice nurse) needs to make sure she's got her stuff (patient progress notes) in high visibility places (8).*

The need to make advanced nursing practice visible at an administrative level was identified earlier in the analysis. This may be achieved through making the advanced practice nurses contribution to quality enhancement evident and raising the profile of the employing institution ... *I think that most would agree that its been beneficial to the department in terms of the standards of practice and even begrudgingly when I come down on those fairly harshly all will stand and say that its reasonable that that sort of work practice review takes place ... so the managers of these departments defer all clinical issues to myself (27).*

5:4:5 Summary - Axial Coding

The process of axial coding yielded the paradigm model (Figure 5:1), which reflected the impact of causal, intervening and strategic conditions upon the exercise of Legitimate Influence. This was an essential element of the substantive theory presented in this thesis. Other integral components, which will be presented in the remaining sections of this chapter, included the core category (Section 5:5:1), the relational propositions (Section 5:5:2) and the identification of empirical indicators (Table 5). These combine to achieve one of the main aims of the research study (Section 1:1), which was to establish a substantive theory representative of advanced nursing practice in adult critical care.

The causal conditions of: Whole Period of Patient Illness Seen as a Priority, Focus on Outcome, Leadership in Clinical Practice and Leader within Specialist Area of Knowledge, need to be in place for the exercise of Legitimate Influence to achieve the consequences of enhanced patient stay and improved patient outcome. The intervening conditions reflected

the processes at work which facilitated or constrained the impact of Legitimate Influence on the patient orientated categories. Amongst the conditions which constrained Legitimate Influence were Conflict, Resistance, Challenge, Gender Bias, Being Over Zealous and a Lack of Available Time to undertake the diverse nature of the role. Challenges were also be seen as facilitative as were the conditions; Political Awareness and Established Values.

Various strategies were depicted indicating the activity undertaken by advanced practice nurses in adult critical care. The main focus of strategic activity was the patient and featured Improved Patient Care, Patient Education and Continuity of Care, which all contributed to Restoring (Logic Diagram 3). Professional strategic activity concentrated on Publication, Lecturing, active involvement within a Professional Organisation and Developing Knowledge Through Research. Providing the intervening conditions identified above did not overly constrain Legitimate Influence the consequences of advanced nursing practice in adult critical care should be evident. These were: Increased Patient Satisfaction, Patient Independence, an identifiable Trajectory of Continuity, being Prepared for Transition through the various stages of recovery and that the patient and family demonstrate a Clear Understanding of the nature of their critical illness and self management following discharge from hospital. Professional consequences, which also contributed to Enhanced Patient Stay and Improved Patient Outcome, were manifest through Collaborative Practice and High Visibility

Up to this point the main focus of the paradigm model, Legitimate Influence and it's essential properties 'credibility' and 'advanced clinical nursing practice', have not been discussed. Together they represent the core category of this grounded theory study, which was revealed through the process of selective coding. The core category will now be explored in the following section. Consideration of the process through which legitimacy was established by participants in adult critical care will be reviewed. The transactional system will also be presented in terms of the contextual conditions from which the relational propositions of the theory were developed. The contextual conditions were derived from the dimensions of sub-categories and were delineated from the properties outlined during open coding (Appendix 14). Finally, the conditional matrix will outline the impact of various conditions on the exercise of Legitimate Influence, placing the findings of this study within the constructivist paradigm. The paradigm model, core category, transactional system and conditional matrix reflect an explanatory level of substantive theory generation. The

intervening conditions: Conflict, Resistance and Gender Bias and the development of the conditional matrix represent one of the theoretical foundations of grounded theory - interpretive interactionism, whilst the essentially personal relationship which develops between the advanced practice nurse and the critically ill patient and family represents symbolic interactionism (Section 3:2).

5:5 The Contribution of Selective Coding to the Emerging Theory

Three remaining elements of the paradigm model have yet to be portrayed. These were the category, Legitimate Influence and its properties 'credibility' and 'advanced clinical nursing practice'. These key elements were not presented during axial coding as they formed the core category upon which all other aspects of the emerging substantive theory were dependent. Therefore, to a large extent this final section represents a summary of the analytic process. The core category was established through identification of the most striking element to emerge from the process of constant comparative analysis. The core category of this grounded theory was:

Legitimate Influence - the key to advanced nursing practice in adult critical care

The paradigm model (Figure 5:1) demonstrated the centrality of the core category Legitimate Influence and its ubiquitous properties, 'credibility' and 'advanced clinical nursing practice'. Enhancing Patient Stay, Improving Patient Outcome and the Development and Dissemination of Knowledge became the subcategories of the emerging theory. The core category provided the answer to the initial research question 'What is 'advanced' about advanced nursing practice in adult critical care?' That is to say Legitimate Influence, underpinned as it was by the properties 'credibility', 'advanced clinical nursing practice' and the sub-category Promoting Knowledge Development and Dissemination, provide the key to the enigma of advanced nursing practice in adult critical care.

5:5:1 Defining and Establishing Legitimate Influence

The essential elements of the core category which required definition, prior to exploring the legitimization of advanced nursing practice in adult critical care, were: legitimate, influence, key, advanced nursing practice and adult critical care. The Shorter Oxford English Dictionary (1975) (SOED) was used to derive definitions, together with interview and participant/non participant observation data.

The root of the word - Legitimate - was based in medieval Latin '*legitimus*' which meant to be 'made legal'. English usage denotes conforming to established standards, based on correct or acceptable principles of reasoning and authorised by a court of law. This implied that the standing of the advanced practice nurse was subject to individuals' (patients, nurses and the interdisciplinary team) expectations of a certain standard of performance. There was a broad consensus amongst participants that an advanced level of practice was evident when they were able to demonstrate credibility in practice, engage in advanced clinical nursing practice and develop and disseminate knowledge. As such, legitimacy was subject to social, spatial and temporal influences and was not an absolute entity. The criteria by which advanced practice nurses are currently judged may alter and that which is deemed to be legitimate become illegitimate activity in the future. Likewise, other criteria may be used in the future to establish Legitimacy.

It was evident that patients did not appear to require a great deal of evidence in relation to the advanced practice nurse's ability (Section 5:4:2 - Negotiation). This was unlikely to remain a static position as the public become more knowledgeable about health and develop greater expectations of the health service. It was interesting to note that although, as yet, patients did not have any great expectation of the role, participants in this study concentrated the majority of their activity on Enhancing Patient Stay and Improving Patient Outcome (Section 5:4:3). Patient orientated conditions of consequence predominated and *reflected the importance of the patient in determining the effectiveness of the advanced practice role* (Section 5:4:4 and Table 5).

Nurses were perceived, by the participants in this study, to have multiple expectations of legitimate advanced nursing practice. The most important of which was the property 'credibility' ... *It is a real struggle to see people who do not have the clinical background, the clinical*

expertise which is required of the role, and how ... they are not accepted by the staff. It is really clear who the experts are. You can't talk yourself into anything if you don't have the clinical background (3) ... A common expectation, from the perspective of advanced practice nurses themselves, was that they should have the ability to provide patient care up to and beyond the level of expert, which was termed for the purposes of this study 'advanced clinical nursing practice' ... they must be experts but does a consultant need to be more than just simply an expert in their speciality and I think they do and I think that's the next leap (27) ... Contextual fieldnotes revealed participants were able to articulate what was meant by an advanced level of clinical nursing practice. It related to ... an ability to think in an algorithmic manner i.e. able to consider the patient's condition and consider several possibilities in terms of appropriate management. The most suitable course of management was then chosen and a series of checks and balances put in place to ensure that the most appropriate course of action had been taken (30) ... This process could also be expressed to other members of the interdisciplinary team ... I can meet with a consultant medic and I can articulate what is the problem (33) ... Other characteristics which legitimate advanced clinical nursing practice were also evident ... combine experience with knowledge, questioning practice, not accepting established opinion, recognising that learning goes on and on and is not finite, constantly needing to evaluate action, push forward the boundaries of practice, gather evidence for practice development and utilise diverse sources (30) ... Whereas expert practice was associated with a ... slick, technically adept 'don't need to think just know' intuitively what to do (30).

In establishing legitimacy, the attainment of higher degrees did not appear to impress nurses in general or add to the 'credibility' of the advanced practice nurse. However, relevant knowledge of the speciality and an ability to practice at an advanced level were seen as vital. Advanced practice nurses were therefore required to ... *carry themselves in such a way that it's apparent ... You don't need to say follow me I'm smarter than you, all you need to do is demonstrate that ... (It's not) because you've got a masters or you've got a PhD and you're doing this, I mean that's just so what ... It does not mean anything, because we're show me kind of people (8) ... and another participant ... I do have the knowledge, I have worked in this area for a long time and I've always kept up to date (32) ...*

Also evident was the willingness to acknowledge limitations, reflected by another participant ... *being prepared to actually expose yourself saying, look this didn't happen right, you know or I didn't do this the right way, there is a better to do this. So you must be prepared to expose yourself.*

Critically analyse what is going on both in terms of context and content. Sometimes it's the context that made things go wrong and sometimes it's what you're actually doing that is wrong. So be able to critically appraise and then obviously be able to draw on other areas (31). This acknowledgement demonstrated an ability to reflect and learn from experience. Therefore, advanced clinical nursing practice not only required years gaining knowledge of the speciality but also an ability to learn from experience. It appeared to be widely accepted amongst the sample group that 'advanced clinical nursing practice' and the resulting 'credibility' may take a considerable amount of time to acquire ... *it allows you to just go back over cases and you can just, you know medicine and nursing is like that isn't it? It's about people and it is about the rare things that actually teach you things, you know (33) ...* This implied that although the acquisition of a higher degree did appear to bring about increased autonomy (Section 5:4:1) and sense of purpose ... *mastery at masters level (27) ...* the learning which was most likely to develop an advanced level of clinical practice in adult critical care, promote 'credibility' and establish Legitimate Influence was that which came from experience of, and reflection upon, the complex responses of the critically ill.

'Credibility' had a broad remit involving both nurses and medical staff. Of both properties which produce legitimacy it was the most important, as one participant stated and the majority of others implied ... *credibility to me is everything (3) ...* It developed over a period of time ... *I knew any day my job could be eliminated. I struggled to establish myself, and I knew I had to forge ahead and be persistent. I appreciated the little gains as very important accomplishments. After being frustrated at a lack of progress in my role or my inexperienced skills, I learned to be patient, take on even small tasks to establish my credibility and accept small gains as progress (34) ...* The process of gaining credibility was also challenging ... *So gaining credibility and acceptability was VERY challenging (34) (participant's own emphasis).* This demonstrated a relationship with one of the intervening conditions, Challenges. Although challenge sometimes constrained Legitimate Influence, it was also a driver for change. So, it was rare that challenges were seen as hostile, but rather as an opportunity to learn and reflect.

'Credibility' was also demonstrated in the ability of the advanced practice nurse to Promote Knowledge Development and Dissemination, although to a lesser extent than 'advanced clinical nursing practice', through the strategic conditions of publication, lecturing and developing knowledge through research (Figure 5:1) ... *Now it might have been because I got in quite early with a very small simple piece of research which I knew would work but because it was*

sticking to the medical in the RCT (Randomised Controlled Trial) it got me some instant credibility and I think that worked really well (31) ... These activities were necessarily focused predominantly on nurses and the medical profession, as the target groups. Thus, 'credibility' and Legitimate Influence proceeded primarily from what was achieved for patients and secondly for the speciality. Knowledge development in advanced practice was applied, that is to say, the primary intention of Knowledge Development and Dissemination was to impact on Enhancing Patient Stay and Improving Patient Outcome. Active involvement within a professional organisation allowed legitimacy to be extended from the local level, described above, to a national and international sphere.

The focus of achieving 'credibility' remained the ability to expedite patient stay and outcome either directly ... *I knew my role was valued and appreciated when one of my attending medical practitioners told another medical practitioner from a different speciality that I, as a nurse practitioner, was the contact person for a patient and that whatever I decided to order was what should be done because I knew more about the patients and how to take care of them than most of the residents. So, I was empowered with the responsibility and authority to make decisions about patient care, and I was respected for my decision (34) ...* or indirectly from participant observation notes ... *have to have credibility to lead in practice and achieve practice development through others (30)* ...

Legitimate status then led to the ability to 'Influence' patient stay and outcome, either directly (hands on care and management) or indirectly (actively guiding practice development), through the development and dissemination of knowledge within the speciality, all of which were grounded in 'advanced clinical nursing practice' and 'credibility'. Legitimacy was gained through an ability to meet the current expectations of both nurses, the interdisciplinary team and the future expectations of patients.

Influence was derived from the Latin 'influer' - to flow into (SOED 1975). English usage implied that an 'effect' was produced upon others and that the 'person' had to have the 'power' or 'sway' to achieve this. During open coding the category, Trustworthiness was identified (Appendix 14 - Figure D). This category demonstrated the concepts of 'credibility' and expertise which initially represented the prerequisites necessary for the peer group to trust the early participants in the research study. However as the process of constant comparative analysis progressed, Trustworthiness was altered to Legitimate Power, as the

data appeared to demonstrate authority was required to enhance patient stay and improve patient outcome. In discussion following participant observation, Legitimate Power became Legitimate Influence (Appendix 14:2 [I]). Emphasis was placed on the importance of 'Influence' which was deemed ... *essential as there is no formal power base - no line management only professional 'credibility'. I have to rely on 'credibility' to lead in practice (30)*... Therefore 'power' was not the correct descriptor. It was identified, during participant observation and informal interview, that inflicting authority or power would not lead to a permanent impact upon the patient's experience of hospitalisation or lead to improved outcome. 'Influence' was seen to be more suitable because of the perceived absence of a formal power base. However, the presence of Resistance (Section 5:4:2) indicated power relationships with the peer group. This will be discussed in greater depth in the final chapter (Section 6:2:2).

The 'effect' of Legitimate Influence in Enhancing Patient Stay and Improving Patient Outcome was demonstrable in the conditions outlining the consequences of advanced nursing practice in the axial coding section (Figure 5:1 and Section 5:4:4) ... *that's what my existence is, my existence is justified every day and ratified every day by the fact that I know I've had an impact on these people ... for me its that patient contact and knowing that I'd done a good job, the best that that I can do, that I've given them optimum health care and that they're happy about it and that they're safe (13)* ...

'Key' was used as a term by participants in relation to the strategic conditions which influenced the sub-categories Enhancing Patient Stay and Improving Patient Outcome ... *I keep thinking if the role is not here ... how does it get followed up on, what is the continuity? How can issues on a particular patient be covered day to day. A medical practitioner can cover the clinical ..., but as far as the other aspects which are very key to how patients comply in the future (3)* ...; of the intervening condition politically aware ... *an ability to politically work the system and to be effective. I think that is key (3)*... and as a property of the causal condition referring to effective communication ... *I set up meetings with key people like the medical staff director, the pharmacy director, the director of nursing, the nurse managers (37)* ...

The SOED (1975) implies the term 'key' is something that is crucial to an interpretation and an explanation of symbols or codes. In the current study, Legitimate Influence was crucial to the performance of advanced nursing practice, which was in itself a 'symbolic' representation of a new 'way of being' within adult critical care nursing for the UK. This also

supported the underlying premise of symbolic interactionism as the theoretical basis of grounded theory and of this study. The symbols were those through which 'credibility', 'advanced clinical nursing practice' and Knowledge Development and Dissemination were established. These were the properties and concepts derived during open coding: specialist knowledge being up to date and relevant, years of experience, valuing clinical expertise by spending time in the care and management of patients, publication, lecturing and active involvement within a professional organisation (Appendix 14).

The interactional nature of advanced nursing practice was demonstrated in the paradigm model (Figure 5:1) where the core category, conditions and subcategories were interdependent. Much of what was achieved for critically ill patients was reliant upon developing relationships and effective communication (Section 5:4:3), that is to say through the peer group and interdisciplinary team.

Many definitions, of advanced nursing practice, have been supplied in the literature (Hamric, 1996). The most limited were those which related to particular roles i.e. the description of the roles of nurse practitioners, clinical nurse specialists, clinical nurse consultants or consultant practitioners (Section 2:1). Limitations were also evident in the description of certain role functions, such as researcher, consultant, practitioner and educator implying that advanced nursing practice was the execution of a "*constellation of sub-roles*" (Ball, 1999:6). As has been made evident in this thesis advanced nursing practice was not primarily about role title or function, but about gaining Legitimate Influence founded upon 'credibility' and an ability to practice at an advanced level. Therefore, it was possible for a nurse to hold the title of CNC, CNS or NP, but not be functioning at an advanced level of nursing practice in adult critical care. In terms of the SOED (1975) 'advanced' means being ahead in development, knowledge, progress, ahead of the times. This was reflected by the flexibility and autonomy revealed by the majority of participants in this study in their concern for critically ill, or potentially critically, ill patients outside the usual geographical confines of critical care units. It was further demonstrated in the emphasis placed on outcomes, rather than the process of care or practice development. The burgeoning delineation of 'advanced clinical nursing practice' enabled the differentiation between it and the broader concept of advanced nursing practice, represented by the substantive theory presented in this thesis. This is discussed in the following chapter (Section 6:2:5).

An 'advanced' level of nursing practice was therefore evident within the findings of this research. It was not necessarily a static state, as it could be affected by temporal and spatial elements. The temporal nature of advanced nursing practice indicated that the ability to exert Legitimate Influence may not be consistent. It may be altered through Conflict, Resistance or Gender Bias from within the peer or interdisciplinary group. The consequences of Legitimate Influence may not always remain those identified in Figure 5:1 and section 5:4:4. New issues will arise which alter the perspective taken on the consequences identified in this study. For example patient satisfaction may be replaced by more objective measures of outcome and may expand to include quality of life following critical illness. These have already been delineated by Kleinpell Nowell and Weiner (1999), however their relevance to adult critical care has yet to be established. Quality of life measures were not, as yet, the focus of strategic activity of the participants in this research study.

Spatial factors involved the influence of context upon the performance of an advanced level of nursing practice. These will be presented within the transactional system. However, when established, current advanced nursing practice in adult critical care as a result of Legitimate Influence reflected the consequences outlined in the paradigm model (Figure 5:1 and Section 5:4:4). A secondary, but still important feature, was that of advancing the nursing profession and was demonstrated in the sub-category Promoting Knowledge Development and Dissemination (Figure 5:1). Legitimate Influence - the key to advanced nursing practice in adult critical care was therefore manifest through:

- A focus on vulnerable patient populations rather than a particular specialist geographical area
- The Whole Trajectory of Patient Stay is Seen as a Priority
- Focus is on Outcome

associated with the above are the nurse orientated properties of :

ability to prioritise, identify patient needs over time, a broad perspective, determining criteria for success, the exercise of autonomy and accountability

- Leadership in Clinical Practice and within Area of Specialist Knowledge

associated with the above are the professional properties of :

practice is beyond that of expert, nurses are empowered, stimulus response is proactive, flexible, astute, visionary, successful publication and conference presentation

and the personal properties of:

perspicacity, stamina and assertion

- A commitment to Improving Patient Care, Patient Education, Continuity of Care, Restoring, Quality Enhancement and the Development of Knowledge through Research

The consequences of advanced nursing practice in adult critical care were demonstrable, in terms of the patient and those close to them, as:

- Increased Satisfaction
- Independence Enabled
- Trajectory of Continuity Evident
- Prepared to Make Transitions
- Clear Understanding of Health Care Problem and Responsibilities

In relation to the profession:

- Collaborative Practice Evident
- Visibility - High

Criteria to evaluate the consequences of Legitimate Influence were developed and are outlined in Table 5.

Table 5: Empirical indicators of advanced nursing practice in adult critical care (In relation to this Table use of the word 'patient' also includes those people closest to them).

Consequences of Advanced Nursing Practice	Empirical Indicators
Increased Patient Satisfaction	<ul style="list-style-type: none"> • Patient satisfaction used as a measure of outcome • The impact of the role on patient satisfaction is demonstrated • A process of negotiation, between the advanced practice nurse and the patient, is evident • Services are altered to achieve patient satisfaction • An emphasis is placed on psychological, as well as, physical improvement • Patients are encouraged to voice issues which are of concern to them
Independence Enabled	<ul style="list-style-type: none"> • Innovative education programmes are evident, which meet patients' needs • Non-traditional care is considered and action taken to maximise independence (e.g. care of ventilated patients in the community, withdrawal of treatment decisions) • Patients are involved in decision making within the hospital and in the community
Trajectory of Continuity	<ul style="list-style-type: none"> • Progress towards recovery and quality of life are assessed and evaluated regularly, during hospitalisation and in the community • The management of particular problems associated with critical illness is

	<p>streamlined (e.g. integrated care pathways developed)</p> <ul style="list-style-type: none"> • Patients report feeling supported during hospitalisation and following discharge • Contact with the advanced practice nurse is encouraged and evident e.g. through the administration of business cards, telephone contact numbers
Prepared for Transitions	<ul style="list-style-type: none"> • Phases of recovery which indicate a need for specific transitional arrangements are identified and patients are prepared e.g. admission to or discharge from intensive care, need for further specialist help (occupational therapist), movement to rehabilitation, discharge home. • Patients with special needs are identified and appropriate arrangements made to aid recovery and independence • Complications which reduce the patients ability to make transitions e.g. incontinence, pressure sores are identified and managed proactively
Clear Understanding	<ul style="list-style-type: none"> • Patients demonstrate an understanding of their health related problems • Patients demonstrate increased feelings of control and responsibility
Increased Efficiency	<ul style="list-style-type: none"> • Decreased number of ventilator days e.g. through a nurse led weaning programme • Decreased length of stay • Efficient use of available beds i.e. bed blocks are cleared • Reduced re-admission rate to intensive care and hospital • Problems which cause re-admission are monitored and managed proactively
Collaborative Practice	<ul style="list-style-type: none"> • Interdisciplinary team working is established on a formal or informal basis • Interdisciplinary team networking evident • Outcomes are established, monitored and evaluated by the interdisciplinary team • The contribution of the advanced practice nurse is evident to the interdisciplinary team

High Visibility	<ul style="list-style-type: none"> • Collegial relationships are apparent • The advanced practice nurse is used as a resource within the hospital by peer group, other professional groups and administrative services, i.e. consulted on issues related to critical illness • Concerns expressed about patient care, management, progress and outcome by the above groups are responded to effectively • Documentation is easily retrievable by all members of the Interdisciplinary team • Impact on patient welfare and outcome is made visible at an administrative level • Publication • Presenting at conferences • Use of research to establish an evidence base for practice • Undertakes research
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The final element of the core category was to redefine adult critical care. The changing nature of which has already been indicated earlier (Section 4:2). In terms of the findings of this study, adult critical care reflected a spectrum which was dependent upon patient need rather than a particular physical environment or geographical location which is commensurate with the most recent publication from the Department of Health (NHSE, 2000), regarding the provision of critical care services and demonstrates the influence of the thesis on current policy initiatives.

Identifying those who were, or could become, critically ill was imperative due to the changing nature of critical care services. Contextual fieldnotes revealed that patient need was not standardised but two broad parameters could be used to determine the need for critical care services. In the first instance it may be that a period of high dependency or critical illness was expected due to trauma (e.g. road traffic accident); was predictable (e.g. cardiac surgery, repair of an abdominal aortic aneurysm, removal of pheochromocytoma); or that the previous health status of the individual (e.g. coronary heart disease) about to undergo surgery was such that recovery required close observation and appropriate manipulation of haemodynamic variables. All the examples outlined above were predictive of patient need for critical care. The second broad parameter of patient need referred to those patients who

had experienced critical illness, during a current period of hospitalisation. They were therefore vulnerable to deterioration and recovery needed to be closely monitored. Appendix 12 indicates criteria which may be helpful in co-ordinating and directing the management of patients who are vulnerable to deterioration and critical illness.

There was evidence that this type of activity was already in place overseas. This has been demonstrated in this research study through the condition of restoring (Logic Diagrams 1 and 3; Section 5:4:3). In order to provide support and ensure patient progress participants in this study moved between emergency, intensive or coronary care areas, to high dependency and the wards. In some instances involvement with patients and their relatives was maintained following discharge from hospital. It appeared many of the participants in this study were continually responding to emerging issues and local needs, almost instinctively. Adult critical care thus embraced the whole trajectory of patient stay, particularly whilst patients were vulnerable to critical illness. It was defined by patient need and not professional jurisdiction or geographical location.

5:5:2 The Transactional System

It is here that the interrelationships of the core category and sub-categories are elucidated (Section 4:7:3). The reasons why strategic actions, related to the exercise of Legitimate Influence in adult critical care, fail to thrive or breakdown are considered and the possibilities for growth and development are presented. To achieve this relational propositions have been derived from the contextual conditions representing the core category - Legitimate Influence - the key to advanced nursing practice in adult critical care - and the remaining sub-categories: Enhancing Patient Stay, Improving Patient Outcome and Promoting Knowledge Development and Dissemination. Contextual conditions represent the properties and dimensions of the categories developed during open and axial coding. For evidence which supports the derivation of the relational propositions refer to Figures A - F and the text of Appendix 14. The relational propositions represent the basis for the further exploration of advanced nursing practice in adult critical care.

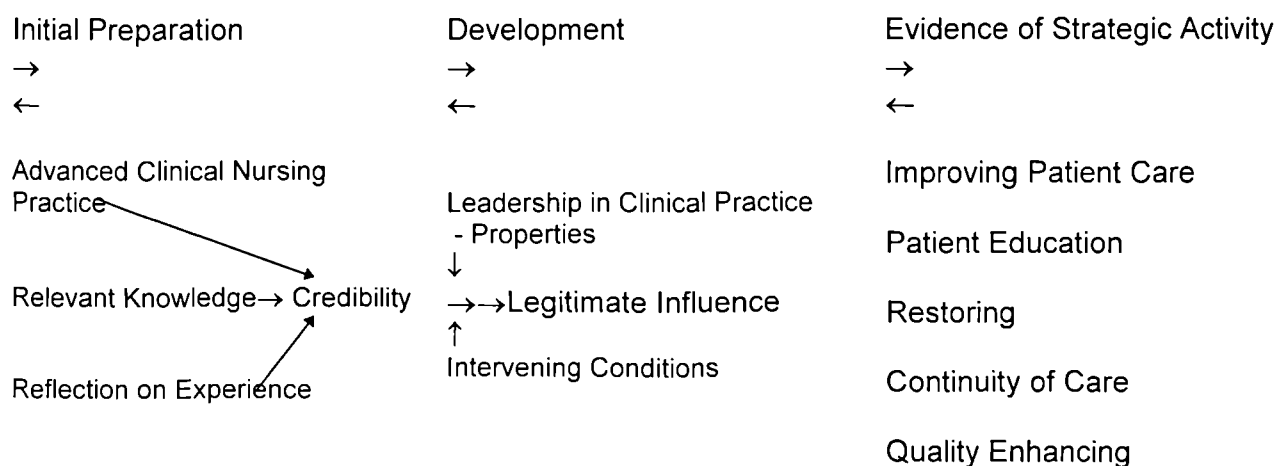
(i) Relational Proposition of the Core Category - Legitimate Influence

Under conditions where clinical expertise is valued highly and clinical practice is at an advanced level; many years of experience have been reflected upon within the speciality; and specialist knowledge is up to date and relevant then 'credibility' is established and Legitimate Influence is possible.

In the first instance the relational proposition only made Legitimate Influence possible not inevitable. It therefore represented the prerequisites for advanced nursing practice in adult critical care, but the continued performance of advanced nursing practice was dependent on a number of internal and external factors. Internal factors included processes inherent within the individual. These were delineated as the properties underpinning the causal condition - Leadership in Clinical Practice (Section 5:4:1; Logic Diagram B, Appendix 15)). External factors comprised those which had their foundation in interpersonal relationships and were reflected by the intervening conditions - Conflict, Resistance and Gender Bias which constrained Legitimate Influence. Alternatively, Overcoming Resistance, Challenges, Political Awareness and Established Values facilitated enactment of the core category. It was upon both these internal and external factors that strategic endeavour potentially thrived or failed.

Difficulties or problems were likely to arise, at three interdependent phases of transition, which were mutually dependent and affected by temporal and spatial attributes (Logic Diagram 4).

Logic Diagram 4 - Interdependent Phases of Legitimate Influence



Temporal and spatial attributes are represented by the two directional arrows, indicating the impermanent nature of Legitimate Influence. The three phases are identified in Logic Diagram 4 as Initial Preparation, Development and Evidence of Strategic Activity. The single directional arrows represent the direction of impact expected if Legitimate Influence is evident. That is to say, strategic activity is exhibited and facilitative conditions prevail. It has already been established that Legitimate Influence was only possible if 'credibility' was retained (Section 5:5:1). The notion of 'credibility' is not static and needs to be continually reinforced and renewed over time. If advanced clinical nursing practice, relevant specialist knowledge and reflection on experience were seen to diminish then 'credibility' would be at risk and Legitimate Influence would be increasingly difficult to achieve.

This study has also demonstrated that contexts of care, or spatial attributes, were also subject to flux depending on patient vulnerability and therefore could impact upon the exercise of Legitimate Influence. Contextual fieldnotes indicated innovations to adult critical care practice were an example of this, for example the utility of percutaneous tracheostomy had increased the number of tracheostomies being performed to reduce ventilator dependency and length of stay in intensive care. This led to the increased vulnerability of patients in wards areas where nurses were unused to caring for patients with tracheostomies. Therefore, to ensure patient safety many participants in this study continued to follow patients after discharge from a critical care area and manipulated hospital systems to meet patient need.

(ii) Relational Proposition of the Sub-Category - Promoting Knowledge Development and Dissemination.

Under conditions where research capability is tangible, presence and high visibility in the national and international arena is evident, active involvement within a professional organisation is apparent, interdisciplinary networking with relevant professional groups occurs, the individual feels passionately about the speciality and has the confidence to publicise specialist knowledge and explicate the purpose and value of the nursing contribution to certain patient populations then knowledge will be developed and successfully disseminated.

There appeared to be two major criteria inherent within this sub-category. Firstly research capability either its evaluation for utilisation in practice or actually undertaking research itself represented knowledge development. Successful completion of a higher degree aided this capability (Appendix 9:1). Following this it was necessary to disseminate knowledge, and knowledge developed within the speciality, through lecturing, conference presentation and publication. Although there was some evidence to support both knowledge development and dissemination (Appendix 5) it was often not given the same priority as patient focused activity by participants in this study. This was perhaps understandable given the emphasis placed upon patient welfare and the only recent integration of schools of nursing within university departments, in the UK, Australia and Canada. In the USA, nursing had been integrated within higher education for some time and the proliferation of publications from that country represents significant progress in this area. A possible solution to this could be association, or even a joint appointment, with universities in the UK, Canada and Australia where research, publication and conference presentation is expected and mechanisms developed to support advanced practice nurses in this strategic activity (Appendix 9:7). Again there were temporal and spatial elements associated with this sub-category. The development and dissemination of knowledge was continuous and required constant review and consideration. Sources of knowledge were also subject to change in terms of both time and place. The movement of chronically critically ill patients into the community was an example of this (Section 5:4:4). Also, the use of knowledge from other disciplines may become more apparent as the critically ill patient population becomes more diverse. For example, knowledge concerning the care of haematological oncology patients as the possibility of survival improves. It has been difficult to find examples of failure in this sub-category as this would result from an inability to write or speak in a cogent manner, examples of which were not readily available in the public domain. Finally, Legitimate Influence and Promoting Knowledge Development and Dissemination exist to enhance patient stay and improve patient outcome.

(iii) Relational Propositions of the Sub-Categories - Enhancing Patient Stay and Improving Patient Outcome

Under conditions where patient satisfaction is high, patients demonstrate increasing independence and continuity of care is established patient stay will be enhanced.

Under conditions where the patient does not demonstrate any confusion concerning their health related problem and its management, their level of preparedness for transition is high and function is as independent as possible then patient outcome is improved.

It can be seen that the relational propositions provide the contextual conditions through which Legitimate Influence impacts on patient care and outcome. They also represent the patient related measures of outcome portrayed as consequences in the paradigm model (Figure 5:1; Section 5:4:4)). The success or failure of the sub-categories, *Enhancing Patient Stay* and *Improving Patient Outcome*, was dependent upon the exercise of Legitimate Influence. Consequently success or failure was a function of the intervening conditions outlined earlier, which constrained or facilitated Legitimate Influence (Section 5:4:4), and the personal and professional properties associated with Leadership in Clinical Practice (Section 5:4:1). Hence the representation of the paradigm model as a scale or balance.

In summary, the substantive theory - Legitimate Influence - the key to advanced nursing practice in adult critical care has been presented at two levels. Firstly, at a descriptive level, through open coding (Appendix 14). Secondly, at an explanatory level through the development of a paradigm model (Figure 5:1, Sections 5:4:1 to 5:4:4), the emergence of the core category (Section 5:5:1) and the portrayal of the transactional system (Section 5:5:2). The core category moved through different phases of initial preparation and development to evidence of strategic activity (Logic Diagram 4) and there was spatial and temporal movement between these phases. This movement depended on the strength of the internal attributes denoted as the properties of the causal conditions (Section 5:4:1) and the effect of external forces identified as intervening conditions (Section 5:4:2). The strategic conditions which preoccupied participants in the current study may alter over time or in different contexts, especially if the role does become accepted in the UK and responds to changing patient needs in adult critical care.

In conclusion, the substantive theory Legitimate Influence, the key to advanced nursing practice in adult critical care, cannot be said to be predictive. It would be questionable if this were claimed as the paradigm within which the study was undertaken was constructivist. What has been presented is a 'snap shot' in time of advanced nursing practice in adult critical care derived from the combined experience of nurse practitioners, clinical nurse specialists and consultants and the health cultures of the USA, Canada, Australia, New Zealand and the UK. What has been surprising, throughout the study, has been the level of agreement reached by participants from different continents on the focus, purpose and outcome of advanced nursing practice; revealed in the grounded theory - Legitimate Influence - the key to advanced nursing practice in adult critical care as the causal, strategic and consequence conditions respectively. The combined paradigm model, core category and transactional system represented the co-creation and representation of the perceived realities of participants from a naturalistic perspective (Sections 4:6 and 3:1).

It is hoped that the theory will help establish advanced nursing practice within adult critical care in the UK, and possibly in other countries where advanced nursing practice is being undermined. To establish advanced nursing practice in adult critical care two key features of the theory are of value. Firstly, the essential importance of achieving and maintaining 'credibility', through 'advanced clinical nursing practice' and Knowledge Development and Dissemination. Secondly, the need to demonstrate the consequences of advanced nursing practice on patient care, experience of illness and outcome.

5:6 The Conditional Matrix

The major contribution of the conditional matrix is to allow participants to 'speak' for themselves, without deconstruction. The purpose of which is to place grounded theory within the constructivist paradigm (Section 3:1). The process of developing the conditional matrix has two stages. In the first instance a conditional path is drawn from a paradigm case. That is to say, an incident or event is identified and associated with the various conditions identified in the paradigm model. The second stage requires the association of the paradigm case at various levels from individual action through to international concerns to form the conditional matrix (Strauss and Corbin, 1990).

5:6:1 The Paradigm Case and Conditional Path

	<p>She was admitted to us about 10 days prior to the episode I am going to talk about, really needing rapid induction, intubation and ventilation. She was difficult to ventilate, she had a fairly nasty ARDS type picture. Uhm, but after about 9 days she was looking pretty good and ready and had been having various weaning programmes, haemodynamically stable, stable in most other ways and respiratory wise we felt we could probably get her off at least onto CPAP and maybe off altogether.</p>
Prepared for Transition Clear Understanding Leadership in Clinical Practice Credibility Proactive Response	<p>Ahm, and her family were very much in the picture with her all of the time, and she was at this stage awake and very with it and very involved in all the planning for coming off. She was a very bright very able girl. Ahm, and I was not directly looking after her that morning, one of the staff nurses was - an F grade senior staff nurse - well trained in intensive care nursing, and she had called me maybe about 10 minutes earlier saying there was something that she wasn't quite happy about but she couldn't put her finger on it, would I come over, would I come and have a look with her, and I said yes of course no problem and I would be down in 5 minutes.</p>
Advanced Clinical Nursing Practice	<p>So I came down and to all intents and purposes the numbers were all absolutely correct, good saturation, good gases, chest X ray improved tremendously, ahm, the anaesthetist who was on was a fairly new SPR who had certainly done no haemotology before and</p>
Conflict	<p>he felt ... that we were worrying, she was worrying over nothing. He wasn't arrogant about it but he just said he couldn't find anything himself, so because the young girl was completely wide</p>
Decreasing Trauma	<p>awake obviously I was at pains to make sure that I didn't frighten her, but I'd met her, I tend to meet all the intensive care patients every day or every other day because of the two sites.</p>
Continuity	<p>So she knew me very well and I just said that I was coming down to do my usual checks, to listen, to look at everything and that kind</p>

Advanced Clinical Nursing Practice	of stuff, and exactly the same as, the only thing I could find that was immediately different was that she appeared to be mentally agitated, slightly, slightly mentally agitated, but not any more so than you might be if you knew you were going to come off the ventilator that you had been on for a while. But there was something to do with the mental agitation that I thought, that's not quite as she has been, that's not quite right. Did a thorough neuro examination, nothing there because all her reflexes were fine, nothing there, and then just happened to glance down at her urine and she'd always had good urine output, and she had always had renal integrity. As I looked down I said, oh - to the staff nurse looking after her - that is bloody today, it hasn't been has it, and she said "no she has never had haematuria or anything". Now this is a girl who had had profound problems with clotting and platelets and she had never really recovered her platelet count very well.
Improving Patient Care	
Crossing Traditional Boundaries	And just that clue reminded me of patients in the past whose first sign of bleeding, a sort of systemic bleeding, was not their platelet count dropping or formation of FDP's or anything like that, was some haematuria. And I suppose in a way that's where experience helps you in that you have the confidence to think actually that could be it.
Advanced Clinical Nursing Practice	So I said well let's test it, and sure enough, it wasn't just bile or anything like that, there was a lot of blood in the urine, so I said have we had any blood up tube, no none at all, and we never had had. We looked at the chest X ray again and the chest X ray was very improved, and I think we had all just gone by the fact that it had improved a lot, because it was disastrous. As I looked at it again, I thought no there is a new presence in this X ray and I think she has got something in her lungs there and it could well be blood. So we, but as I say gases and everything seemed all right, but we decided, so I phoned, I spoke to the anaesthetic SPR, said that I had met this before and I was very frightened that what had now happened was that she had started to bleed into her lungs, because of her chronic shortage of platelets. He quite rightly said
Crossing Traditional Boundaries	
Advanced Clinical Nursing Practice	
Conflict	

Risk Taking	there is no evidence for it, da da da da, and I said I know but I
Advanced Clinical Nursing Practice	would be really much happier if we did a CT scan. I explained my reasons. Luckily I suppose over the years I have developed a really good respectful relationship with our anaesthetic consultants and also our radiologists, so I phoned the one that was on with the,
Autonomy	you know the SPR was with me, just said that she was just this little bit irritable and there was this urine and was able to mention a couple of other patients who had had the same, and he
Advanced Clinical Nursing Practice	remembered those patients, and he said well yeah, there is no hurry here we can X ray her tomorrow or the next day, there is no
Credibility	hurry, let's do a head and chest scan.
Collaborative Practice	
Improving Patient Stay	
Influence Over Patient Management	
Advanced Clinical Nursing Practice	Now the CT of the head showed that indeed she'd had a small cerebral bleed, uhm small enough not to influence anything like her pupil reactions or anything like that, but we were absolute, when she'd had CT scans like 5 days previously because of her poor condition, uhm, so that was new and I am sure that was the slight cerebral irritation. Uhm, but when we CT'd the lungs, we have got a new spiral CT, it showed not only that there was blood on the lungs but that it had been there for probably about 2 - 3 weeks, it was now iron in her alveoli, so uhm we brought her back from CT scanning, put her on, obviously ... did everything to ameliorate her clotting, which was not laboratory wise any different to how it had been, but of course she was bleeding. Uhm, and unfortunately very sadly that night, despite all the facts she had a huge torrential thoracic bleed. Now I think the only; so the outcome was she died from it, the outcome was not that my intervention made her you
Focus on Outcome	know her outcome any better, but in a way we talked about it for a long time, the SPR anaesthetist, the nurses looking after her and myself and the consultants and the paediatric consultants. And I guess what we came up with in the end was that, and I don't know whether this was to make ourselves feel better, but her parents
Collaborative Practice	definitely found this, and I spoke to them again last week.
Continuity	

Improving Patient Care	Uhm, that if she had been off the ventilator, because she would definitely have continued, you know she would have had that bleed anyway, if she had been off the ventilator she would have been completely awake and it would have been ghastly for her, and you know. Whereas once we had found this, we loaded her up with all clotting things, but we also put more sedation on board, so that she could sleep, and therefore when this all happened, I mean obviously full resuscitation was continued and everything, but the good thing was that she was able to be unconscious very very quickly. And her parents also were warned about it and I guess that, I mean we didn't say to them that was going to happen, but we said there is a problem here and you know, we told them all about it, so they were slightly forewarned and they feel, I often see relatives after a very traumatic death like that, uhm at several stages after death, and they feel that their, they had had just a bit of warning and ... and I suppose also you kind of bring in lots of things don't' you. The SPR anaesthetist, I guess the way you learn to handle these things is that there is no use insulting everyone else, we all need to work together and, so when it all came about the first thing he said to me was "my goodness you were right I need to listen", and of course my way to deal with that then is to say, well you know I could' have not been right and wish I hadn't been, uhm you know, but in a way to make sure that he, that I dealt with him in a way that he can ask nurses in the future and he can trust the CNS without being made to feel small, because after all he hadn't done very much haematology and it wasn't his lack it was just that it was quite a rare thing to happen. And again then to speak to the staff nurse and say well done you, because she was the one that alerted all of us to it, and that's really valuable
Decreasing Trauma	
Identify Patient's Needs Over Time	
Continuity	
Prepared for Transitions	
Collaborative Practice	
Credibility	
Effective Communication	
Leadership in Clinical Practice (empowers nurses)	

Key: ARDS - Adult Respiratory Distress Syndrome; FDP's - Fibrinogen Degradation Products

5:6:2 Association of the Paradigm Case

The essentially interpersonal nature of advanced nursing practice in adult critical care and Legitimate Influence was demonstrated by the paradigm case. At the individual level, implicit within the paradigm case were the properties inherent to the causal condition - Leadership in Clinical Practice. Risks were taken in contacting senior medical staff and alerting the parents to a problem having arisen. Both could have resulted in conflict and tension, but demonstrated a proactive response to a sad and tense situation. It also appeared implicit within the text that the CNS had established values about continuity achieving the best outcome possible for the patient and her family, even though the result was death. The paradigm case also revealed sensitivity in valuing the contributions of others both in the peer and interdisciplinary group.

Included in the group interactions were another nurse, two members of medical staff, the patient and parents. It was likely that the participant would not have been approached by the senior staff nurse if she had not been accorded 'credibility'. Some conflict was evident in the relationship between the nurse and Specialist Practice Registrar (SPR). Following a thorough physical (crossing traditional boundaries) and psychological assessment by the participant, it was obvious some negotiation was required in an attempt to meet the needs of the patient. When this was not automatically forthcoming senior medical staff, with whom collaborative practice was evident, were contacted. Multiple tensions existed in this situation. These arose from the personal concerns of the participant related to the potential needs of the patient, supporting the nurse who first established '*there was something that she wasn't quite happy about*' and the factual interpretation of the situation by the SPR. The issue of Gender Bias might also be included in this situation, as the two nurses were female and the SPR, male. However, as demonstrated in the axial coding section the issue appeared to be one of 'credibility' rather than gender, as the remaining text in the paradigm case suggests.

Credibility and Collaborative Practice were apparent where the mutual experience of senior medical personnel and the participant, related to diverse patient responses, led to agreement for further exploration of the problem. The findings did not bode well for the patient, but even though a positive outcome was not possible in terms of prolonged life, the least traumatic death possible in the circumstances was orchestrated. This was valued by

the parents with whom the participant was still in contact. This emphasised the importance of Continuity for the participant as an Established Value. Some features of Restoring were apparent even though these did not directly effect the patient. Restorative features, which may have aided the parents following the death of their child, included involving the parents in the situation, thus engendering a clear understanding of a deteriorating situation, together with a clear focus on a Trajectory of Continuity. The situation was a developing one and preparation for the next transition was required by the patient and parents. Respectively, these were associated with an increase in sedation for the patient and, for the parents, continuity of support throughout a tragic experience.

Conflict between the SPR and nursing staff was diminished when the SPR demonstrated insight into learning from those who were more experienced in the speciality. This potentially indicated the beginning of Collaborative Practice between the personnel involved, although this was already apparent between the participant and senior medical staff. The nurse was also empowered through confidence building and emphasis being placed on the importance of her decision making and clinical ability. This example also demonstrated the difference between 'expert' practice and 'advanced clinical nursing practice' (Section 6:2:5). The participant had a sufficient breadth of experience to learn from diverse patient response, whereas the staff nurse knew something was amiss but was unable to articulate why she felt this unease, demonstrating an intuitive, but not an interpretive grasp of the situation. The participant was also able to provide rationale for her decisions, in an unusual clinical situation, indicating another characteristic of advanced clinical nursing practice.

Within the culture of adult critical care medical staff were the major gatekeepers and exerted the greatest control over what happened to the patient. This was questioned earlier in this study ... *Well the patients are always the doctor's, unless they don't want them, and that is something that came out of the nurse practitioner (study), 'how dare this person touch my patient' which really eats me because these patients are here for health care, they're not here for one person or another(13) ...* This research study also demonstrated that Conflict was most likely to occur where high control needs were evident ... *Namely, if the medical practitioner feels he or she may not have control of the situation and they have high control needs ... there is always a conflict there (3) ...*

Not all medical staff had high control needs as demonstrated in the paradigm case, but it appeared these were more prevalent in junior medical staff than those at a senior level. It may be possible that just as the gender issue may really be also be an issue of 'credibility'; control needs were more related to level of experience and confidence to manage a particular situation ... *getting back to the junior medical officers, I think that's one of the biggest stumbling blocks for them is that they don't have maturity, they don't have presence of self they don't know how to deal with people and I think they have great knowledge but they just don't know how to apply it and they don't know how to deal with ... issues that arise (13)* ... That is to say the less sure a person is the higher the need for control. New ways of working may need to be considered, in the interests of patient welfare, where senior medical and nursing staff who can exercise Legitimate Influence lead junior medical and nursing staff who are gaining knowledge and experience, as indicated by the participant in the paradigm case ... *so he (Surgical Consultant) and I do that together with one of his juniors and I take one of the night (nursing) staff and one of the day staff. Basically we are looking at nursing and medical issues together and they go together anyway...* This forms the basis of a key recommendation related to practice (Section 6:4:1).

At an organisational level, contextual fieldnotes revealed, the institution from which the paradigm case comes valued it's advanced practice nurses and placed them in a position where they could influence policy from a practice base. The participant frequently contributed to policy discussion at the Royal College of Nursing about advanced practice and intensive care nursing. If advanced nursing practice was not understood by the employing institution it was likely that management and practice roles will continue to be confused. This was evident in some states in Australia, such as Queensland and South Australia where clinical nurse consultants had become clinical nurse managers due to an alteration in pay scales which did not benefit advanced practice roles. Without Leadership of Clinical Practice it was also unlikely that 'nursing' within a particular institution would be able to make a difference, whereas this forms a fundamental component of the UK government's policy where Making a Difference (1999) supports the institution of consultant practitioners, now called nurse consultants (Health Service Circular, 1999a). Downsizing was still an issue in some countries, particularly Canada. This made the indirect nature of some advanced nursing practice roles such as the CNS (USA and Canada) and CNC (Australia and New Zealand) roles particularly vulnerable, unless a positive impact on patient care and outcome can be demonstrated. Therefore, the importance of establishing

criteria which denote Enhanced Patient Stay and Improved Patient Outcome and evaluating the consequences of the role, as suggested in Table 5, are fundamental to the success of advanced nursing practice in adult critical care. This is discussed in greater depth in the following chapter, where an action research project is outlined. The aim of this is to operationalise the theory presented in this thesis (Section 6:2:1). It also forms a major recommendation for future research (Section 6:4:2).

5:7 Summary and Conclusions

The main aims of the research were achieved (Section 1:1). A substantive theory was developed, at an explanatory level, which was grounded in the everyday experience of advanced practice nurses in adult critical care who were participants in the research. Co-creation of the model was achieved through co-analysis and member validation (Section 4:6 and Appendix 9). Insight in to the socialisation of advanced practice nurses was gained through exploration of the intervening conditions. Finally, in identifying the strategic conditions it was possible to establish the activity of advanced practice nurses in adult critical care and postulate developmental requirements. The key elements of the grounded theory, Legitimate Influence - the key to advanced nursing practice in adult critical care, indicated the prerequisites of Legitimate Influence, the processes through which enhanced patient stay and improved patient outcome were achieved and criteria which enabled evaluation of the impact of advanced nursing practice on critically ill patients and those close to them.

The prerequisites, for advanced nursing practice in adult critical care, included the underlying properties of Legitimate Influence, which were 'credibility' and 'advanced clinical nursing practice'; and the causal conditions: Whole Trajectory of Patient Illness Seen as a Priority, a Focus on Outcome and Leadership both in Clinical Practice and within a Specialist Area of Knowledge. 'Credibility' was characterised, in this thesis, as an ability to combine experience and knowledge over time through the process of reflection. This was utilised to the benefit of patients and their families. It was also associated with questioning current practice and established opinion with the aim of crossing traditional professional and practice boundaries to achieve enhanced patient stay and improved patient outcome. Diverse sources were used to scrutinise the evidence base for practice in adult critical care,

and where appropriate, evidence was used to influence patient care through protocols or standard setting. Any alteration to practice was evaluated and its utility questioned. This process of questioning research and established opinion aided the promotion of Knowledge Development and Dissemination. The ability to achieve publication and present at conferences led to increased 'credibility' in the eyes of the interdisciplinary team. However, it was the ability to practice clinically at an advanced level which established 'credibility' from the perspective of the peer group.

Participants in this study were able to articulate the difference between expert and a level of practice which was beyond that of expert in adult critical care. Expert practice was associated with being slick and technically adept. It was also demonstrated through an intuitive, reactive response to patient problems common to the speciality and reflected a customary specialist focus (Section 1:2). That is to say the expert practitioner was unit bound, whether this be an Intensive or Coronary Care Unit. As a result of this, and the instability of the patient, short term goals were set. Advanced clinical nursing practice was demonstrated through algorithmic thinking. This implied a series of possibilities were considered in response to recognised patient need. Action was then taken and effectiveness evaluated in terms of patient response. The response of the advanced practice nurse was less standardised because use was made of previous experience, particularly in relation to more unusual patient presentations of critical illness of which the paradigm case was an excellent example. Once a patient's particular problem had been identified a proactive response was made which focused on the long term features of the patient's problem which attempted to provide Continuity of care over time and Restoring the individual to their former health status or one which was improved, if possible. This demonstrated an emphasis on patient populations rather than a particular specialist area. In order to achieve continuity advanced practice nurses also demonstrated the ability to manipulate or disrupt institutional systems. Three major elements of the thesis have been combined in the above summary. These form three separate areas for discussion in the final chapter. Primarily, these were the differentiation of expert and advanced clinical nursing practice (Section 6:2:5); the purpose of crossing traditional professional boundaries (Section 6:2:2) and the focus on restoring (Section 6:2:3).

The participants in this study were also able to articulate the difference between medical and nursing practice at an advanced level. Advanced practice nurses tended to relate to the patient as 'whole package' rather than a specific medical condition. This entailed the involvement of the patient and those close to them in decision making. Alternatives were offered, in terms of management or treatment, so that the patient felt comfortable with the decisions being made. Contextual fieldnotes indicated participants also offered consistency in contrast to junior medical staff who rotated between specialities on a regular basis in order to meet professional educational needs. Support was also offered once the patient had left the particular adult critical care area and this was sometimes maintained following discharge from hospital. *This finding provided the basis for delineating the focus of future medical and nursing research in adult critical care outlined as the final recommendation for future research (Section 6:4:2).*

Having established 'credibility' and 'advanced clinical nursing practice' the causal conditions of the theory, Legitimate Influence - the key to advanced nursing practice in adult critical care, were then established. The centrality of the patient was reflected in the need to focus on the whole trajectory of patient stay in hospital and on outcome. This was achieved through either direct or indirect means (Logic Diagram 2; Section 5:4:1). Various professional attributes were associated with these causal conditions. These were the ability to prioritise activity, identify patients needs over time particularly beyond the walls of identified Intensive or High Dependency Units, demonstrate a broad perspective and be able to establish criteria which determined the success or otherwise of strategic activity. Other key characteristics were those of autonomy and accountability. Autonomous practice appeared to be enhanced in those who were undertaking, or had undertaken, postgraduate education. This forms an essential area of discussion in the final chapter (Section 6:2:4) and forms the basis of future recommendations for research (Section 6:4:2)..

Leadership, both in clinical practice and within a specialist area of knowledge was also required. Leadership in clinical practice was based on the professional properties of risk taking; a proactive and flexible response to issues arising from the care of the critically, or potentially critically, ill; being astute and establishing a vision of what nursing can achieve in the care of the critically ill. Personal characteristics indicated the importance of assertion in crossing traditional boundaries; and that stamina and perspicacity were required to achieve Leadership in Clinical Practice. Leadership Within a Specialist Area of Knowledge was

reflected through publication, public speaking and active involvement within professional organisations.

The processes through which advanced nursing practice legitimately influenced enhanced patient stay and improved patient outcome were represented in both the strategic and intervening conditions. Strategic activity emphasised the importance of patient orientated concerns and comprised: Improving Patient Care, through decreasing the trauma of hospitalisation, crossing traditional boundaries, influencing patient management, effective communication and networking across the whole interdisciplinary team; Continuity of care was achieved by following the patient through and Patient Education which focused upon learning to cope, the day to day management of the problem which caused the critical illness and implementing educational strategies. These three elements contributed to Easing the Transition of the patient through a complex system, the maintenance of support and maximising Individual Function which in turn attempted the restoration of the patient to a similar level of health existing prior to admission or one which might be improved (Logic Diagram 3). However, as the paradigm case demonstrated patients do not always recover. Therefore the strategic activity associated with Restoring also applied to those close to the patient. Quality Enhancement tended to function within narrow margins concentrating on the reduction of complications or length of stay. This focus on restorative care is discussed in greater depth in the following chapter (Section 6:2:3).

Identification of the intervening conditions achieved the second aim of the study which was to gain a perspective of the socialisation of those engaged in advanced nursing practice in adult critical care. Conflict and Resistance occurred with two key groups and for two different reasons. In relation to the peer group it was associated with developing a patient, rather than a professional, orientation to practice. This linked with issues raised in section 1:1 where a professional rather than a patient focused approach to the provision of health care was described. A patient focus, in terms of this study, was represented by measures taken to ensure continuity of patient care resulting in a change to established shift systems or the presence of the family during ward rounds. Most conflict, however, occurred with medical staff and in the main arose as a result of high control needs in relation to traditional professional boundaries, 'credibility' or reflected an unwillingness to embrace change.

Resistance to change was also apparent. Activity undertaken to overcome this included developing relationships. In the peer group this was associated with helping in the care of a patient if a nurse was experiencing some difficulty and working with nurses at the bedside. This latter function also enabled the advanced practice nurse to demonstrate 'credibility'. Role modelling and valuing the contributions of other nurses also helped overcome resistance. Collegial relationships with medical staff were also developed on the basis of these two fundamental properties and engendered through attendance at, and contribution to, specialist meetings. Negotiation was necessary in relation to the two groups already identified and also patients and hospital management. Negotiation was required with the peer group in establishing a unified perspective of what 'nursing' was attempting to achieve within a particular speciality. Consistency, in terms of the values and beliefs of the advanced practice nurse, was also extremely important to other nursing staff. To both medical staff and hospital management the role was negotiated in terms of different agendas. Medical staff looked for continuity of care and patient satisfaction, whilst hospital management were interested in effective risk management, for example, reducing the incidence of complications such as infection or decubitus ulcers and reducing length of stay. Due to the leadership aspects of Legitimate Influence, relations with hospital management were characterised by this process of negotiation rather than one of subordination reflected in the delineation made by Obholzer and Roberts, featured in section 1:1. Successful negotiation with the patient and family lay in providing information which enabled individuals to deal with the impact of critical illness.

The major factors which challenged the existence of advanced nursing practice in adult critical care were mixing management and practice roles and continually having to prove the worth of the role to the interdisciplinary team and to hospital management. However, not all challenges were seen as negative and many participants used challenges as a platform from which innovations to practice could occur.

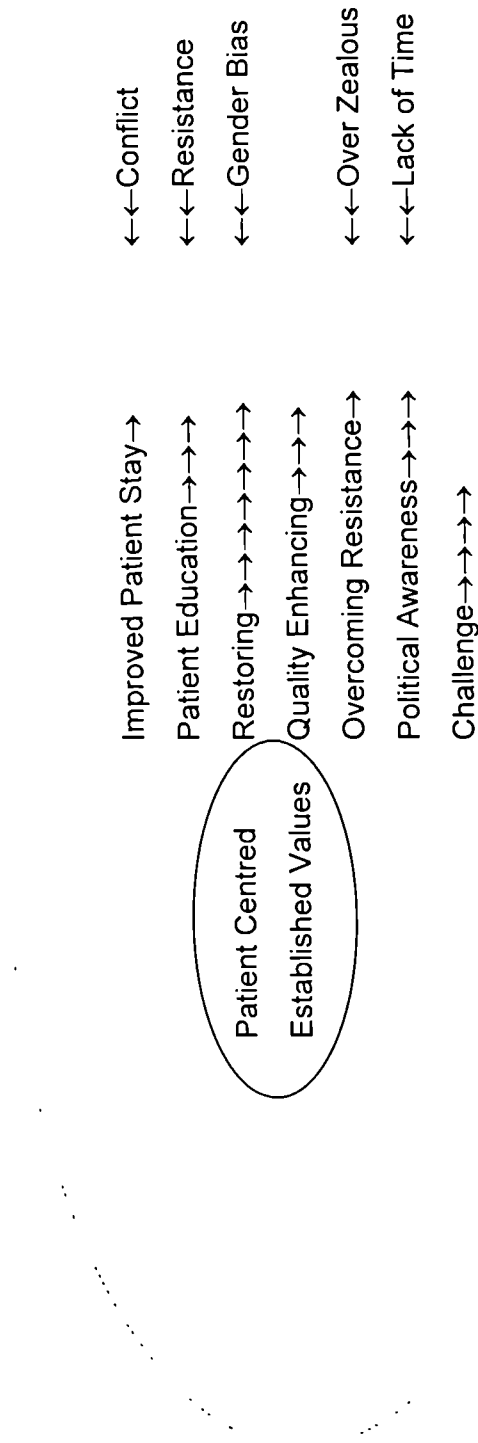
Gender appeared to be a problem for some advanced practice nurses, and this together with the exercise of power (revealed in the intervening conditions Conflict and Resistance) within the culture of adult critical care will be explored in the following chapter (Section 6:2:2). The purpose of which will be to explore their potential impact on the development of Legitimate Influence and to compare and contrast the findings of this research with current perspectives within the literature. Other personal factors which constrained strategic activity

were associated with being overzealous and having little time to meet all the requirements of Legitimate Influence. Political Awareness demonstrated a particular focus on patient related issues whereas all preceding intervening conditions represented the impact of the interdisciplinary team on the exercise of Legitimate Influence. To demonstrate Political Awareness a knowledge of the systems within an organisation was vital. Disruption and mobilisation of these in achieving enhanced patient stay and improved patient outcome was another demonstration of Legitimate Influence in the care of the critically ill.

Established values related mainly to the development of a service which was patient and family orientated rather than one which sought primarily to meet the needs of a particular professional group or managerial directives. If Legitimate Influence was underpinned by 'credibility', 'advanced clinical nursing practice' and Knowledge Development and Dissemination (Figure 5:1), then Established Values might be seen to be at the core of the grounded theory and the strategic and intervening conditions reflect lines of compromise in everyday practice (Logic Diagram 5). These may be extended and Legitimate Influence increased if strategic and facilitative intervening conditions were in the ascendancy. However, a narrowing of the lines of compromise would be demonstrated if conflict, resistance, gender bias, lack of time or an over zealous approach predominate, as indicated by the following Logic Diagram.

The final feature of the grounded theory reflected the consequences of advanced nursing practice in adult critical care portrayed as critical indicators which allowed the theory - Legitimate Influence - the key to advanced nursing practice in adult critical care - to be evaluated for its impact on patient welfare, together with the professional consequences of advanced nursing practice (Section 5:4:4; Table 5). The relational propositions cited indicated the relationship between variables, through which the presence of advanced nursing practice in adult critical care may be appraised.

Logic Diagram 5 The Core of Advanced Nursing Practice in Adult Critical Care and Associated Lines of Compromise



Key - the solid line represents the point from which no compromise is made, the interrupted line represents the impact of strategic activity which expands the Legitimate Influence of the advanced practice nurse or alternately indicates retrenchment in the face of compelling intervening conditions. The arrows represent the direction of movement inherent within the strategic and intervening conditions.

The final aim of the research study required an exploration of the development and activity of advanced practice nurses in adult critical care. Activity has already been addressed through the identification of intervening and strategic conditions above. Development included both formal and informal education. Formal education implied a structured approach to learning the knowledge and skills necessary to practice in adult critical care. Postgraduate education was most associated with advanced nursing practice. Those participants who had not experienced postgraduate education tended to lack a sense of autonomy, were unable to assert the value of advanced nursing practice, often felt powerless, did not participate in developing knowledge through research or disseminating this through publication or conference presentation. However, as stated earlier in the thesis although postgraduate education developed important features of advanced nursing practice, the lack of which is indicated above, it was not the sole contributor. Informal learning also occurred indicating an ability to learn and reflect on experience gained in the care of the critically ill. This was vital, if the complex responses of the critically ill were to be interpreted accurately, appropriate action taken and effectiveness evaluated. This informal education took a significant amount of time, possibly in excess of five years.

In conclusion, the results identified above revealed a number of areas worthy of further exploration within the literature. The final chapter will address the contribution of the theory, *Legitimate Influence - the key to advanced nursing practice in adult critical care*, to the current status of knowledge concerning the topic area, the limitations of the study and the main recommendations of the thesis.

CHAPTER 6

Legitimate Influence - the key to advanced nursing practice in adult critical care

Discussion and Conclusions

From the preceding chapter it can be seen that the aims of the research study were met and the research question answered. The activity and development of advanced practice nurses was portrayed in the causal conditions associated with leadership, the attainment of *credibility and an ability to engage in advanced clinical nursing practice*. Socialisation within the role was rendered through the intervening conditions which, whilst these were not unknown within the literature regarding the sociology of nursing, had not been featured in any previous model of advanced nursing practice (Section 2:4). Finally, the paradigm model, core category, relational propositions and empirical indicators formed a substantive theory which delineated advanced nursing practice in adult critical care.

The purpose of this final chapter is to explore the contribution made by this research to the existing body of nursing knowledge. It will also establish where the theory supports or supplements current literature concerning the nature of advanced nursing practice. Conclusions will then be drawn. Critical reflection upon the research process will be undertaken and limitations acknowledged. Recommendations for future practice, research and policy will then be made. The thesis will conclude by providing an account of the future direction of advanced nursing practice, in adult critical care, within England, based on the findings of this research study. It had been the intent of the study to inform the debate, associated with advanced nursing practice in adult critical care, within the UK (Section 1:3). However following devolution of government (Scotland Act, 1998; Government of Wales Act, 1998) discussion will only relate to England.

6:1 Significance of the Theory - Legitimate Influence: the key to advanced nursing practice in adult critical care

To achieve clarity this section will outline the unique findings of the research study. Key elements will then be extrapolated from the overview and related to the existing literature.

The results of this study and ensuing discussion contend that advanced nursing practice in adult critical care is based upon Legitimate Influence exercised by practitioners who seek to enhance patient stay and improve patient outcome (Figure 5:1). This was achieved through direct or indirect means (Logic Diagram 2) and was not constrained by geographic location. The substantive, grounded theory constructed from the perceived reality of participants supplied an integrated approach to the concept of advanced nursing practice in adult critical care. It has achieved this through the identification of structure, process, outcome and intervening variables in the guise of causal, strategic, consequences and intervening conditions respectively. It therefore provides a framework for the comprehensive evaluation of advanced nursing practice in adult critical care. This will form the first part of the discussion following this overview of significant findings (Section 6:2:1).

The paradigm model and the primary relational propositions were essentially patient focused, rather than professionally (Manley 1997; Ackerman et al 1996; Shuler and Davis, 1993a; 1993b), educationally (Moloney Harmon, 1999) or administratively (Calkin, 1984) orientated. The substantive theory was derived inductively and cocreated by the researcher and key participants, as opposed to panels of experts (Moloney Harmon 1999; Ackerman et al, 1996); individual construction (Manley, 1997) or deductive approaches (Dunphy and Winland-Brown 1998; Shuler and Davis 1993a, 1993b; Calkin, 1984). As such the substantive theory, Legitimate Influence - the key to advanced nursing practice in adult critical care, represents a unique contribution to the knowledge base of nursing.

Legitimate Influence was achieved through the attainment of credibility which in turn was founded upon an ability to practice at an advanced level and to promote and disseminate knowledge. The articulation of key features portraying advanced clinical

nursing practice was also evident in the substantive theory (Section 5:5:1). This provides a foundation for the future delineation of expert (Benner et al, 1996; Benner, 1984) and advanced levels of clinical practice. As such, it forms an area worthy of future discussion (Section 6:2:5). Credibility, developed over time, represented integration of both knowledge and reflection upon experience. This was underpinned by, but not solely a result of, formal education at the postgraduate level. The ability to develop and disseminate knowledge was also a crucial factor in the attainment of Legitimate Influence.

The causal conditions necessary to achieve enhanced patient stay and improved patient outcome related to a long term focus on the well being and outcome of patient populations. It encompassed the entire trajectory of patient care and management (Logic Diagram 1; Section 5:4:1). The scope of advanced nursing practice in adult critical care was not geographically defined but determined by the needs of the patient population over time and in different locations.

Leadership of both practice and specialist knowledge development formed the impetus to achieve enhanced patient stay and improved patient care. Leadership is ubiquitous within the literature associated with advanced nursing practice (Goodman 1998; Manley, 1997; Malone, 1996; Howard, 1994). However, usually emphasis is placed on the profession of nursing rather than focused on patient well being and outcome. The orientation of participants in the current research therefore marks a departure from the usual focus found in the literature associated with advanced nursing practice. Innovation was also associated with vision and the ability to inspire improvement in the care and management of the patient population, rather than only responding to the exigencies of organisational demand. Thus, leadership was differentiated from management (Section 1:1).

Leadership was seen to demonstrate the credibility of the individual engaged in advanced nursing practice because it was conferred by intraprofessional and interprofessional groups. It was not automatically accorded to a particular title. However, in the current research, CNSs and CNCs placed more value on Leadership than did NPs (Section 5:4:1). Those unable to lead practice, or the development and dissemination of knowledge within the speciality, would not be representative of an

advanced level of nursing practice as represented by the substantive theory derived through this research. It was also suggested that the development and use of skills previously within the domain of another discipline, and the crossing of traditional boundaries, represented a logical and necessary extension of a nurse's ability to expedite patient care and management in a consistent and timely manner (Section 5:4:3; Logic Diagram A - Appendix 15), which entailed adjustment to illness, enabling independence and, where cure cannot be effected, caring for the dying and those close to them. It was not a simple case of physician substitution, represented by earlier research associated with nurse practitioners (Section 2:3). The catalyst for the extension and expansion of skills and knowledge was patient focused. It was not based on interprofessional expedience.

Another key finding of this study was the perceived increase in autonomy apparently associated with the attainment of a postgraduate degree. This also represented an attribute of Leadership in Clinical Practice (Logic Diagram B - Appendix 15). The attainment of postgraduate education and its relationship with advanced nursing practice has been an issue of some debate amongst practitioners, although this was not represented in the literature (Section 4:4). Whilst the findings of this research do not represent substantial proof of increased autonomy as a function of postgraduate education, it does represent an interesting phenomenon worthy of further exploration (Section 6:2:4).

Enhanced patient stay and improved patient outcome were achieved primarily through strategic conditions which emphasised restoring patients to a former, or improved, health status. If this was not possible then attempts were made to help patients and families cope with the limitations imposed by critical illness or, as demonstrated in the paradigm case, to provide support during a period of loss and bereavement (Sections 5:6:1; 5:6:2). Restoring, represented the culmination of strategic activity which eased transition towards health and across complex networks; maintained support and promoted individual function through improved patient care, continuity and patient education (Logic Diagram 3). It formed a key element of the substantive theory and will be discussed in greater depth (Section 6:2:3).

The promotion of knowledge development and dissemination was achieved through a variety of methods which involved two specific forms of strategic activity. At a local level the dissemination of knowledge required the systematic review of specialist knowledge with the intent of improving the welfare of critically ill patients and those close to them. The dissemination of knowledge at a local level included affiliation with a University demonstrated through invitations to lecture. It was suggested combined academic/practice appointments of advanced practice nurses would facilitate knowledge of the research culture and enhance the ability of advanced practice nurses to undertake research (Appendix 9:7). The development of knowledge through research provided a unique opportunity to distinguish the impact of nursing on patient recovery from critical illness and this forms a key recommendation of the thesis in terms of practice (Sections 6:4:1) and research (Section 6:4:2). At the national and international level conference presentation, publication and active involvement within professional organisations was expected (Sections 5:3iv; 5:5:2ii).

Research has been cited in the literature as a key activity associated with advanced nursing practice (Hamric et al, 1996). However, until the findings of this research were made evident, it appeared as a statement of intent rather than one which would bear investigation. Even in the findings of this research study it was accepted that engagement in scholarly activity was difficult to achieve given the exigencies of clinical practice.

The consequences of enhanced patient stay and improved patient outcome, through the exercise of Legitimate Influence, predominantly represented patient outcomes sensitive to the impact of nursing (Section 5:4:4). In particular, the consequences outlined formed preliminary empirical indicators which could be used to evaluate the effectiveness of the advanced practice role. These were presented in Table 5. Measures of quality of life also feature in the literature in relation to recovery from critical illness (Kleinpell-Nowell and Weiner, 1999). However, these were not identified by participants in the current study. It may be that, as the theory develops, quality of life measures may be included in the paradigm model as outcome criteria. One issue does arise, however, in association with the work of Kleinpell-Nowell and Weiner (1999). This relates to the use of single measure designs in measuring the effectiveness of advanced nursing practice. It is extremely difficult to find a

statistically significant causal association between an advanced practice nurse and a particular outcome. Research which has attempted this has failed to demonstrate a difference (Hanneman et al, 1994). Therefore, recommendations from this study suggest the use of action research in demonstrating the effect of advanced nursing practice in adult critical care (Section 6:4:2). The professional consequences of Legitimate Influence indicated the potential for collaborative practice and increased visibility. Increased visibility made evident the contribution made to patient recovery from critical illness, in the care of the dying and the support of family members and friends through the exercise of Legitimate Influence (Section 5:5:1; 5:6:1; 5:6:2).

The tentative nature of advanced nursing practice in adult critical care was also established (Logic Diagram 4). The exercise of Legitimate Influence was affected by a variety of factors which spanned initial preparation, development and had the potential to impact on strategic activity associated with advanced nursing practice in adult critical care (Logic Diagram 4). These were evident in the intervening conditions of constraint which were conflict, resistance and gender bias. This represented a salutary reminder, omitted in earlier models of advanced nursing practice (Section 2:4), of the factors which inhibit the exercise of Legitimate Influence. Perhaps, more importantly, their presence indicated the ubiquity of power within intraprofessional, interprofessional and organisational relationships. This issue has been observed in nursing generally (Mackay, 1995) but had not as yet featured as a limitation associated with advanced nursing practice. It therefore forms a focus of future discussion within this final chapter (Section 6:2:2).

This study also demonstrated the potentially deleterious effect on the care, management and outcome of patients from critical illness if professional or organisational agendas were pre-eminent. That is to say, professional or organisational aims were not always commensurate with patient welfare. A proactive response to this, by participants in this study, was evident in the strategic conditions associated with improving patient care and influencing patient management (Section 5:4:3). This was also evident in the intervening conditions of political awareness and established values (Section 5:4:2). However, although established values provided consistency in beliefs and behaviour, an over zealous approach indicated an unwillingness to negotiate with others and may have demonstrated an abuse of personal power.

At the inception of the study debate regarding the contribution of various advanced practice roles was polarised (Section 1:1). The composition of the sample group, in the current research study, resulted in the extrapolation of similarities and differences between the various forms of advanced nursing practice. All the roles were similar in terms of their primary aim, in the context of adult critical care, which was to enhance patient stay and improve patient outcome. They differed in two major areas only. Leadership was emphasised by CNSs and CNCs, whilst more direct care activity was evident in the NP role. This one factor alone brought into question the utility of the former roles in the USA, Australia, New Zealand and Canada (Quaal, 1999). It had already almost disappeared, within the adult critical care areas of the UK (Section 1:1). This indicates, again, the importance of evaluating the impact of the advanced practice role on patients and families, which the substantive theory derived through this research enables (Section 6:2:1).

It has already been suggested within the thesis (Section 5:1:1) that the restriction of advanced nursing practice to a "*constellation of sub-roles*" (Ball, 1999:6) did not demonstrate the full potential of advanced nursing practice in terms of patient welfare. Many of the features inherent within previous theoretical descriptions, such as consultant, educator, researcher, and expert practitioner (Table 1), were evident in the substantive theory derived from this research. Consultancy could be associated with the professional property of empowering other nurses. Research and education were subsumed within the subcategory, Knowledge Development and Dissemination, as develops knowledge through research and lecturing. Education was also evident in the strategic condition, patient education. Evidence for these associations may be found in Appendix 15 - Logic Diagram A and Section 5:4:1. Expertise in practice was evident in the preliminary findings of the research (Ball, 1999) but was altered to advanced clinical nursing practice in the final depiction of the paradigm model (Figure 5:1; Section 5:5:1).

However, the essential contribution made by the substantive, grounded theory presented in this thesis, lay in the patient orientation of Legitimate Influence: the key to advanced nursing practice in adult critical care, the restorative nature of advanced of Legitimate Influence, the development of empirical indicators for evaluation (Table 5) and the identification of conditions which constrain or facilitate the exercise of Legitimate Influence.

The preceding summary represented the unique contribution of the substantive theory, Legitimate Influence: the key to advanced nursing practice in adult critical care to the current body of nursing knowledge. Key elements arose from this which had resonance within the literature. These were the evaluation of advanced nursing practice (Section 6:2:1), the impact of power relationships upon the exercise of Legitimate Influence (Section 6:2:2), the restorative nature of the strategic activity undertaken (Section 6:2:3), the effect of postgraduate education (Section 6:2:4) and the delineation of expert and advanced clinical nursing practice (Section 6:2:5). The association of these elements and relevant literature will now be discussed.

6:2 Key Elements of the Substantive Theory and Association with Current Literature - Intermediate Conclusions

6:2:1 The Evaluation of Advanced Nursing Practice

The importance of evaluating advanced nursing practice has already been established in the preceding discussion. It is necessary if the effectiveness, or otherwise, of advanced nursing practice is to be demonstrated. The purpose of the following analysis is to compare and contrast current models of evaluation with that offered by the substantive theory portrayed in this thesis.

Currently, the literature appears divided into models of advanced nursing practice and models which evaluate the concept. Whereas the substantive theory, Legitimate Influence: the key to advanced nursing practice in adult critical care combines both of these elements. None of the models reviewed thus far suggest evaluative criteria (Moloney Harmon, 1999; Dunphy and Winland-Brown, 1998; Manley, 1997; Ackerman et al, 1996; Shuler and Davis, 1993a; 1993b Calkin, 1984). However, evaluation models have been developed by Sidani and Irvine (1999 - Canada), Humphris (1999 - UK), Hammerton (1999 - UK) and Byers and Brunell (1998 - USA). The variety of countries involved in establishing evaluative criteria is also indicative of their importance. These authors all utilise the approach to quality assurance developed by Donabedian (1980, 1966), except for Hammerton (1999). This approach emphasises the consideration of structure, process and outcome variables. However, it omits appraisal of intervening variables, such as conflict or gender bias,

which may have a considerable impact on the exercise of advanced nursing practice. This forms the focus of future discussion where their potential effect will be made evident (Section 6:2:2). Hammerton (1999) does suggest undertaking a review of strengths, weaknesses, opportunities and threats (SWOT), but fails to distinguish whether the evaluation tool refers to higher or advanced levels of nursing practice. Humphris (1999) utilises the terms 'specialist', 'advanced' and 'higher' synonymously. Therefore, the work of both Hammerton (1999) and Humphris (1999) will be excluded from this review as each has the potential to obfuscate the focus of evaluation.

Following an extensive review of the literature, Girouard (1996) and Wilson-Barnett and Beech (1994) were unable to identify a model which would facilitate evaluation of the CNS role. The need for which is now seen as urgent (Urden, 1999). Sidani and Irvine (1999) have, however, developed a conceptual framework which provides a basis for the evaluation of acute care nurse practitioners. The evaluation criteria suggested by Byers and Brunell (1998) relate to advanced nursing practice as a concept, rather than particular role titles. This was also a feature of the substantive theory presented in the preceding chapter. The results of this thesis suggest that advanced nursing practice in adult critical care is characterised by the focus of practice, i.e. enhanced patient stay and improved patient outcome. Therefore evaluative criteria should appertain to all types of advanced nursing practice, be they indirect (CNS or CNC) or direct (NP), in order to establish the effectiveness of the concept in terms of patient welfare and outcome. The conceptual framework developed by Sidani and Irvine (1999) is therefore limited in scope.

Byers and Brunell (1998) emphasise the importance, in evaluation, of value for money. This is an aspect which has been omitted by Sidani and Irvine (1999) and was not raised by any of the participants in the current research. However in this era of cost containment, evident in all the countries where data were collected, this is an important and valid issue. The method of calculating value, provided by Byers and Brunell (1999) is, however, fairly crude. It comprises the division of cost into what has been achieved in terms of outcome. This is consistent with a patient orientation to evaluation but fails to numerically quantify outcome variables, thus precise calculation is impossible. At best only a rough subjective estimate could be performed which calculates the cost of the advanced practice nurse and what was

achieved in terms of patient satisfaction, short and long term outcomes, functional status and resource utilisation.

The structure variables of both models (Sidani and Irvine, 1999; Byers and Brunell, 1998) include the patient, the characteristics of the advanced practice nurse and organisational characteristics. Sidani and Irvine (1999) indicate that ACNPs were more likely to care for the sicker, female, uninsured person. However, this contention appears to be based on advanced nursing practice in primary care. Sidani and Irvine (1999) do not cite the work of Rudy et al (1998) identified earlier in this thesis (Section 2:3) which indicated that although patient outcomes were similar, as measured by APACHE 3 (Knaus et al, 1991), resident medical practitioners cared for patients with greater severity of illness than their NP counterparts.

Sidani and Irvine (1999), within their conceptual framework, also did not indicate the need for postgraduate study as a prerequisite for an advanced level of nursing practice, which Byers and Brunell (1998) and the current research study see as important (Section 6:2:4). However, it was acknowledged by Sidani and Irvine (1999), that nurses with postgraduate education were more likely to work within a nursing framework of care. Whereas nurse practitioners, educated to certificate level, tended to lack autonomy and followed a medical model.

Both models were derived deductively from the literature associated with advanced nursing practice. Sidani and Irvine (1999) delineate the subroles of clinician, educator, researcher and administrator, as the main process variables. The limitations of which have already been identified in this thesis (Sections 2:4; 6:1). In an earlier study Sidani et al (1997) did address the importance of continuity, comprehensive care and co-ordinating services, which were important elements within the current research. However, these were omitted from the later conceptual framework (Sidani and Irvine, 1999). The importance of gaining credibility and practising beyond the level of expert in order to influence patient care, management and outcome has not been addressed by any of the evaluation or advanced practice models identified within this thesis. Therefore these attributes represent a unique contribution, of the substantive theory presented in this thesis, to the current body of nursing knowledge. Byers and Brunell (1998) itemise some process variables which

have resonance with the current research study. These were patient education, co-ordination and psychosocial needs. However, they also include issues associated with access and efficiency, prescriptive patterns and compliance with evidence based protocols which were absent in the substantive theory presented in this thesis.

Outcome variables were itemised, by both Sidani and Irvine (1999) and Byers and Brunell (1998) as increased efficiency, satisfaction, functional ability and knowledge of clinical condition. These were comparable with some of the conditions of consequence outlined in this research study, associated with patient satisfaction and increased efficiency. There is also a growing amount of evidence within the literature that the positive impact of advanced nursing practice is particularly manifest in areas such as patient satisfaction and increased efficiency (Mundinger 2000; Coopers and Lybrand, 1996; Hill et al 1994 - Section 2:3). Less well developed, within the literature, were those which addressed increased independence, safe and effective transition, continuity and consistency of care provision and helping patients and families understand the cause of their need for adult critical care and future self management. All of which feature as the consequences of the paradigm model presented in this thesis (Figure 5:1, Section 5:4:4). These conditions were also indicative of an ethic of care underpinning the practice of participants in this study and an emphasis being placed on nurturing patients towards recovery evident in the strategic condition of restoring. This will be discussed in more depth later in this chapter (Section 6:2:3).

In conclusion, the evaluation model suggested by Sidani and Irvine (1999) is limited in scope as it only seeks to evaluate ACNPs. Byers and Brunell (1998) suggest aspects of advanced nursing practice which should be evaluated and which are absent from the research represented in this thesis. These relate to the value of advanced nursing practice, access to services and compliance with evidence based protocols. All of which merit inclusion in any future evaluation strategy.

In relation to current literature, the specific contribution made by the substantive theory presented in this thesis was that it combined a model of advanced nursing practice, which was patient orientated, with criteria for evaluation (Figure 5:1; Table 5). It was inductively derived and therefore represents the perceived reality of

individuals functioning as advanced practice nurses, rather than relying on the viewpoint of a limited number of experts. Of particular note also was the emphasis placed on the restorative aspects of advanced nursing practice which should contribute to positive patient outcomes. The importance of credibility and advanced clinical nursing practice in the attainment of Legitimate Influence, without which outcomes may not be achieved effectively, also marked a departure from current theoretical representations of advanced nursing practice and evaluation. Other factors which could impact upon the performance of advanced nursing practice were identified as intervening conditions. These were represented in the current research by, for example, conflict, resistance and gender bias. Identification of the intervening conditions also demonstrated integration with the theoretical foundation of grounded theory, interpretive and symbolic interactionism and these will be discussed in the following section.

It is suggested that the substantive theory presented in this thesis be used as a framework for evaluating all forms of advanced nursing practice using an action research framework. The rationale for this is that the substantive theory has been derived from a mixed sample group and is therefore relevant to all types of advanced nursing practice. It does not demonstrate bias against direct or indirect manifestations of the role. Action research has been chosen because its use is appropriate when a change to current practice needs to be evaluated. This is particularly relevant to the situation in England at the present time given the introduction of the Nurse Consultant (Making a Difference, 1999; Health Service Circular, 1999a). Action research is also pertinent because its underlying philosophy is congruent with an ethic of care which underpins the substantive theory presented in this thesis. Evaluation of advanced nursing practice, utilising the substantive theory presented in this thesis, will form the focus of future recommendations (Section 6:4:2).

6:2:2 Power Relationships and the Promotion of Essential Attributes Associated with Legitimate Influence

The impact of power relationships may constrain the exercise of Legitimate Influence, and by association advanced nursing practice in adult critical care. Within this research the ubiquitous nature of power within relationships was demonstrated through the presence of the intervening conditions - conflict, resistance and gender bias (Section 5:4:2). The identification of these conditions indicates the association between the formal theories which underpin grounded theory, symbolic and interpretive interactionism, and the substantive middle range theory derived from the utilisation of grounded theory methodology (Section 3:4), presented in this thesis. Facilitative conditions were also evident within the data and were depicted as overcoming resistance, political awareness and established values.

The ability to exercise Legitimate Influence, in terms of causal, strategic and consequence conditions was dependent upon the forces which signalled the constraint of advanced nursing practice. Hence the depiction of the substantive theory as a scale or a balance. The impact of power relationships has been addressed previously within the literature associated with the sociology of nursing (Porter, 1999; Mackay, 1995; Porter, 1991), but thus far had not been isolated as factors which affect advanced nursing practice. These elements form the framework of the following discussion which will begin by demonstrating the association of formal theory with middle range substantive theory. It will then go on to address the concept of power relationships associated with advanced nursing practice. The essential attributes promoted by participants in this research, evident in the strategic activity associated with Legitimate Influence, were based on an ethic of care and nurturing. These were often seen to be in conflict with dominant forces within the adult critical care environment and, as such, will also be included in the following discussion.

Symbolic and interpretive interactionism represent formal or grand theory (Section 3:4). Interpretive interactionism seeks to explore the relationship between self and society (Denzin, 1989a). 'Self' refers to the manner in which self is interpreted by the individual as a result of relationships with others, and this is represented by symbolic

interactionism. However interpersonal relationships do not occur in isolation, they are also affected by dominant forces in society. Chief amongst these are culture, power and gender. Acknowledgement of these dominant forces demonstrates the development of symbolic interactionism to its later form, interpretive interactionism (Denzin 1989a; 1992; 1998; Section 3:3). The presence of conflict, resistance and gender bias within the results of this research demonstrated an association between the formal theory which underpins grounded theory (Annells, 1996), and the substantive middle range theory - Legitimate Influence: the key to advanced nursing practice in adult critical care. The characteristics of middle range, substantive theory were evident within the results of the research study (Section 3:4). These were the delineation of a concrete representation of advanced nursing practice, which in the first instance had only a narrow application to adult critical care (Figure 5:1). Empirical indicators were also derived (Table 5) and relational propositions identified (Section 5:5:2). The focus of the following discussion is the impact of power relationships and the identification of essential attributes, within the substantive theory, which indicate a change in the current focus of critical care. There appears to be a shift in emphasis from one of cure to one which also values the attributes of nurturing. The findings of the research study will now be discussed in relation to the literature associated with culture, power and gender.

Culture was not raised as a distinct entity by any of the participants in this study. This could be explained by the immersion of advanced practice nurses within the culture of adult critical care; to the extent that norms, status and values were so ingrained that they were no longer consciously perceptible (Haralambos and Holborn, 1990). Status and role, both ascribed (at birth) and achieved (through occupation), is dominated by the feminine gender within nursing. Evolution in this aspect of the adult critical care culture was apparent. Evidence from the current study indicated efforts were being made by participants to promote the value of what were often portrayed as feminine characteristics associated with nurturing (Section 5:4:3). Essentially these comprised a recognition of the need for consistency and continuity in health care; a more holistic approach to the care and management of illness represented through working with, rather than on, patients and families; the need to use terminology which was understandable, rather than the use of knowledge as power; and the need to focus on what can be achieved for critically ill patients throughout illness and recovery rather than remaining in a geographically

determined area. This was also evident in the work of Mundinger et al (2000), Dunphy and Winland-Brown (1998) and Hill et al (1994) (Sections 6:1; 2:4; 2:3).

These attributes demonstrate a cultural feminist perspective (Porter, 1998). The perspective of cultural feminism accepts that there are differences between the sexes. Rather than seeking equality with men, it promotes essential characteristics attributed to women which comprise caring and nurturing. In the context of this research these related to easing transition, maintaining support and improving individual function, evident in the strategic condition of restoring. The specifics of which have been outlined in the previous paragraph. Therefore, the characteristics which form the established culture within adult critical care are undergoing change when exposed to advanced nursing practice.

Inevitably, the presence of conflict and resistance intimated the presence of power relationships (Porter, 1996a). A number of theoretical explanations of power exist within the literature (Wilkinson, 1999). Many of these were limited, in terms of the current study, because of their sole emphasis on the macroprocesses of political and economic power (Marx, 1970; Weber, 1979). Although these elements are pervasive, the influence of microprocesses associated with interpersonal relationships are omitted. These were a dominant theme within this study and were demonstrated in the strategic activity undertaken by participants and the demonstration of political awareness. Therefore the perspective of Foucault (1980) was more relevant to this research. Foucault (1980) suggests power is a process through which dominance relations form between groups (interprofessional and intraprofessional), organisations (hospitals) and men and women (gender). Power is exercised, where there is inequality, at the point of interaction between individuals. Therefore although attempts are being made to promote the value the feminine attributes of nurturing, and by association caring (Evans, 1995), inequalities still exist. The presence of power, in terms of the classification outlined above will be used to structure the following discussion. This relates to the exercise of power through relationships in terms of interprofessional and intraprofessional groups, organisations and gender bias.

Situations of conflict were represented in graphic language by some participants as *"choosing which hill to die on"* (Participant 8), *"nail your colours to the mast"* (Participant 30) and frequently related to *"who is in control at any one time"* (Participant 3) of the *"turf"* or *"territory"* (Participant 13). Most conflict was experienced with medical colleagues. This was also supported in the literature (Hamric et al, 1996) particularly in high dependency areas (Woods, 1998). Many participants in this study and the literature reflected the continued dominance of medicine within global health care systems (Woods, 1998 - UK; Cotton, 1997 - Australia; Hamric et al, 1996 - USA). The power of medicine to achieve dominance has developed over preceding centuries where increasing constraint has been placed on those who are not licensed to treat the sick (Jones, 1994). The power base of medicine lies in the emphasis placed on cure, control over diagnosis (Porter, 1991) and prescription. This, therefore, was the *"territory"* or *"turf"*, in which the participants of this study found conflict often occurred. Currently, the culture of adult critical care assumes nurses are subservient to the dominant medical culture. However an increasing number of advanced practice nurses have the education and, perhaps more importantly, the experience to both diagnose, prescribe, and effectively contribute to both patient and family welfare as demonstrated in the paradigm case. Within this study little distinction could be made between nurse practitioners and clinical nurse consultants/specialists in their ability to do this.

However, most advanced practice nurses only seek the ability to diagnose and prescribe in order to make legitimate that which has, until recently, remained illegitimate activity (Crown Report, 1999). That is to say experienced nurses have for many years informed junior medical staff of the patient's diagnosis and guided them towards the usual treatment ordered by the medical consultant (Mackay, 1995; Stein, 1978). Diagnosis and prescription are however seen only as vehicles through which the effectiveness of the advanced practice role can be enhanced. The main aim, as indicated earlier in the thesis, was not to usurp medicine, but to provide a qualitatively different service which emphasises nurturing as well as cure (Section 2:3). This may involve skills and practices formerly in the domain of other disciplines. The aim therefore, in crossing traditional professional boundaries (Section 5:4:3), was not to fill a gap in medical care but to fill a gap in health care (Smith, 1995) characterised by the cultural feminist ideal of nurturing.

The presence of conflict in relationships with medical colleagues, presented in this thesis, indicated an evolution in the historical relationship between nurses and doctors. Historically, relationships were characterised by the doctor-nurse game (Stein, 1978) whereby nurses were subservient and influenced patient management in a covert manner. The aim of this relationship was to engender the trust of the patient and preserve the omnipotent status of the doctor. There is some evidence within the literature that this situation is now changing. Nurses have become more assertive (Porter, 1999; Lewis et al, 1990; Stein et al, 1990; Hughes, 1988), although this was by no means universal (MacKay, 1995), and participate in what Porter described as *"informal overt decision making"* (Porter, 1991:731). This was characterised by a breakdown in deference and active participation in decision making. Informal overt decision making did not reflect an equal relationship between medicine and nursing as yet, but did indicate a reduction in the patina of subservience characterised in earlier research (Stein, 1978). The research cited above also was not representative of an advanced level of nursing practice. If advanced practice nurses were to become the leaders of nursing from a practice base (Section 1:1), indicated in the causal conditions of the paradigm model (Figure 5:1; Section 5:4:1), they may form the vanguard of change in interprofessional relationships.

In dealing with conflict many participants, in the current study, chose to avoid direct confrontation and situations of conflict unless it was a matter whereby they considered patients to be at risk. The results of this study demonstrated most participants attempted to develop a collaborative approach to clinical practice with interprofessional colleagues, based on credibility, rather than one which constantly challenged the current balance of power. Collaborative practice was therefore a consequence of Legitimate Influence rather than a causal condition (Figure 5:1; Section 5:4:4).

Collaborative practice was defined, in terms of this study, as a team of people, educated in various aspects of health care, where professional boundaries were blurred. The key characteristics of collaborative practice or interdisciplinary team working are trust, tolerance and a willingness to share responsibility (Nolan, 1995). It implies a shared understanding of what the service aims to achieve and therefore requires shared interprofessional values (Henneman et al, 1995). This had been

achieved by many of the participants in this study. Where collaborative practice had not been established adult critical care provision was marked by divided interests which frequently reflected professional, rather than patient orientated, agendas (Henneman et al, 1995). The presence of which has already been indicated at the beginning of the thesis (Section 1:1) and was evident in the conflict experienced by some participants (Section 5:4:2).

Resistance is another manifestation of power (Porter, 1996a). In the current research study resistance was reported by participants to be associated mainly with nursing staff who opposed a more patient centred approach to adult critical care. Examples of a patient centred approach, within the results of this study, referred to increased family participation, participation in wards rounds and retaining eight hour shifts to maintain a consistent nurse presence at the bedside. Woods (1998) also found increased resistance amongst nursing staff to the advanced practice role and this was thought to be borne out of fear and distrust. The advanced practice role was also perceived as a threat, especially to those nurses who were very experienced (Hamric and Taylor, 1989) and this was particularly evident in high dependency areas (Woods, 1998). Tension was apparent in the results of this study where terms such as "*horizontal violence*" (Participant 14) were used. These examples also demonstrated a perceived unequal distribution of power (Porter, 1996a) only this time on an intraprofessional rather than an interprofessional basis. It implied the peer group perceived an inverse power relationship with advanced practice nurses even though key participants in this study were anxious to eschew power and authority, preferring the term 'influence' in deriving the core category (Section 5:5:1; Appendix 14 - 14:2(I)).

Resistance was also evident interprofessionally. Medical staff often seemed quite sceptical of innovations to practice, in the early stages of working with an advanced practice nurse. However if patient care was improved, usually measured as improved efficiency in the terms of this study, resistance often diminished (Section 5:4:2).

Activity aimed at overcoming resistance was substantially evident within this study (Section 5:4:2) and the literature. In relation to the peer group, activity was centred upon providing help and support as a means of building up relationships. The role of the advanced practice nurse in empowering other nurses was also a key focus of advanced practice models which aimed to transform the culture of nursing (Manley, 1997) and was a property of the causal condition, Leadership in Clinical Practice, within the current study (Section 5:4:1; Logic Diagram B - Appendix 15). Particular emphasis was placed on valuing the contributions of other nurses and encouraging participation in practice development through positive feedback and suggesting further areas of development. Other strategies included role modelling and in particular this was associated with direct clinical practice. Examples given within the data were physical assessment and the use of equipment such as Continuous Positive Airways Pressure (CPAP).

Organisational discord was represented by the concept of professional - bureaucratic conflict role (Kozier et al, 1992; Ahmadi et al, 1987) and was identified as a potential problem facing advanced practice nurses in section 2:2. This was evident in the results of the current study where bureaucratic features often constrained the effective use of advanced practice nurses (Section 5:4:2). The key features of a bureaucracy were described by Weber (1979) as a hierarchy of authority, specialised division of tasks undertaken by certain officials, governed by rules and formalised record keeping. Evidence of bureaucratic constraint was tangible in the power of management to hire and fire advanced practice nurses without apparently understanding the contribution made by them to patient welfare. Many of the participants in this study felt their role was not understood or valued (Section 5:4:2). The literature from various countries is divided on this issue. Cotton (1997) found managers in New South Wales were unaware of the potential contribution CNCs could make in terms of increased consistency in care. Whereas Scherer et al (1994) demonstrated knowledge of the sub roles by administrators was evident in New York State. However, as indicated earlier in the thesis (Section 4:4), knowledge of this nature did not guarantee CNS survival during the last decade in the USA (Quaal, 1999).

This emphasises the need to evaluate the difference being made to patient experience and outcome from critical illness by advanced practice nurses, indicated in previous discussion (Section 6:2:1). As indicated in the introduction to the thesis managers focus on the function of the organisation, whereas leaders of nursing practice (advanced practice nurses) look to the future and pursue certain goals and ideals (Section 1:1). Some agreement concerning the contribution made by the advanced practice nurse to the aims of the organisation might better aid understanding and perhaps more importantly increase the value placed on the advanced practice role.

The specialised division of tasks, rules and formalised record keeping mitigate against the changes required if health services are to develop a patient orientation to the care and management of the critically ill led by advanced practice nurses. The need for advanced practice nurses in adult critical care to cross professional and geographical boundaries permeated the results of the current study. However, the intervening condition political awareness did demonstrate that the authority of a bureaucracy can be negotiated. The formation of what Strauss (1963:1) has termed "*negotiated order*" appeared to play a fundamental part in this process. "*Negotiated order*" suggests that the formal distribution of power, in a bureaucracy should not be assumed but politically negotiated. This established a link between two intervening conditions identified through this research: Overcoming Resistance and Political Awareness. A system is developed, by the advanced practice nurse, which disrupts bureaucratic characteristics and mobilises other mechanisms with the aim of Enhancing Patient Stay and Improving Patient Outcome. This was negotiated, usually at an unconscious or informal level, on an interprofessional, intraprofessional and organisational basis.

It should be noted that the participants in the current research reflected a different perspective to those of Woods' (1999:111) who embodied the "*contingent nature of advanced nursing practice*", that is to say were resigned to "*organisational governance*" (Woods, 1999:114) or control imposed by the employing authority. The relative inexperience of the participants in Woods' (1999) study (two years as a nurse practitioner) may provide a rationale for this acquiescence, whereas many of the participants in the current study had in excess of two years experience (Table 2).

In terms of Foucault's (1980) perspective on power relationships, the sources of group and organisational dominance have been discussed. Relationships between men and women will now be addressed. Gender bias was evident in the current study (Section 5:4:2). The first participant suggested that more opportunities were open to him than to female colleagues, even though the topic was not included within the interview schedule (Appendix 2). This may be because hospitals, as organisations, also tend to reflect a masculine culture characterised by observation, technique and discovery rather than the ease and comfort of the injured and sick (Wicks, 1998; Witz, 1992). Therefore the perspective of male nurses may be more contiguous with that of both organisations and male medical colleagues.

The ease and comfort of the sick reflects the paradigm of nursing which is founded in the female ethic of care described by Gilligan (1982). It reflects earlier discussion associated with the changing culture of adult critical care where advanced nursing practice attempts to promote the value of characteristics associated with nurturing. It is enshrined in the work of nurse theorists such as Watson (1985; 1979) and Leininger (1981). The female ethic of care values relationships, the connectedness of human life and the restorative aspect of care. It is interesting to note that, restoring, represents an important focus of strategic activity undertaken by participants in this study, demonstrating a nursing rather than a medical orientation to practice by both NPs and CNS/CNCs. This was also evident in a study comparing nurses and nurse practitioners orientation to practice (Walsh 1999). The argument that NPs do not have a nursing orientation to their practice (Manley, 1996), as indicated earlier in the thesis, does appear to be an increasingly redundant debate.

The female ethic of caring (Gilligan, 1982) also provides an explanation of the facilitative intervening condition, established values. Central to the action taken by advanced practice nurses was the belief that patient needs predominate. These warrant entering the situations of conflict and resistance described earlier. Established values also featured a desire to care about, rather than for; and a desire to work with, rather than on critically ill patients and their families which was also demonstrated in the strategic conditions and consequences of Legitimate Influence. Established values were, however, subject to the impact of particular contexts, reflecting the contextual nature of an ethic of care (Blum, 1993). This indicated a relative, rather than absolute perspective in relation to judgements which were based

on established values. Elements within the social context of practice which influenced value judgements were demonstrated in Logic Diagram 5. Compromise might be necessary in contexts of conflict, resistance and gender bias. Whereas, values might be more readily evident in the contexts implied by the strategic conditions and the facilitative intervening conditions of political awareness and overcoming resistance.

This provided a possible explanation of the difficulties experienced by some participants and their medical colleagues, evident in the statements *"what could this woman teach me"* (Participant 13) and *"some of the surgeons as well you know and one actually said to me, I don't believe in all that mumbo jumbo, education and case management"* (Participant 23). That is to say, patient related situations were approached from different perspectives. Those of nursing appeared obscure because the dominant medical culture espouses the symbolic male attributes of cure, objective appraisal of symptoms and the application of general principles (Friedman, 1993). Whereas, nurses in general and advanced practice nurses in particular, reflected the symbolic female attributes of nurturing. This implied developing relationships with patients and their families in order to enable independence and a clear understanding of the problems faced by the patient. Various forms of strategic activity underpinned this nursing orientated approach to patient care and management, which were evident in the results of this study. These included the strategic conditions of improved patient care, patient education, continuity and restoring (Section 5:4:3; Logic Diagram 3).

However when, restoring, became the focus of practice, the results of this study demonstrated, male medical colleagues appreciated the different approach taken by advanced practice nurses and outcomes achieved for patients. This was in contrast to much of the feminist research performed over the last twenty years which highlighted the invisibility of nursing work due to its intimacy with the failing physical body (Wicks, 1998) or the emotional labour of caring (Smith, 1992). An explanation of this situation, not yet identified in the literature, was the lack of practice orientated leadership, identified in Section 1:1. Nursing, in the UK, has lacked leadership in practice and the educational preparation to develop knowledge from nursing practice. If Leadership, both in clinical practice and in the development of specialist knowledge (Figure 5:1; Section 5:4:1), can be established then it is possible that the

value of nursing's contribution to patient welfare, promoting the ethic of care and cultural feminism, may become increasingly more evident.

The purpose of the preceding discussion was to explain some of the processes inherent within power relationships, demonstrated in this study and the associated literature. It was not to ascribe one particular set of virtues to a particular gender or professional group (Porter, 1998). It is acknowledged that both gender groups can exhibit the traits outlined above. Separating them aids explanation but in real life it is accepted that cultural codes of femininity and masculinity allow behaviour to be mapped, but do not predict it (Davies, 1995). Davies (1995:150) also suggests it is time to "*move beyond gendering and the power/passivity dichotomy*" to a point where practitioners are:

"neither distant (masculine) nor involved (feminine) but engaged. They will neither be autonomous nor dependent, but interdependent; neither instrumental nor passive, but the instigators of encounters in which solutions can be negotiated; neither the master of knowledge nor the user of experience, but the reflective user of experience and expertise ..."

(Porter, 1999:106 [précis of Davies, 1995:149 - 150])

In summary, the pervasive nature of power and inequality is manifest within the literature and the results of the current study. However, there are signs that changes within the culture of critical care are emerging. In particular these relate to the promotion of attributes, currently associated with the female gender and ethic of care, that emphasise the importance of nurturing which in this research is evident within the strategic condition of restoring (Logic Diagram 3). The promotion of an ethic of care and the attributes associated with cultural feminism seek to redress the balance in the care of the critically ill where cure currently predominates.

Advanced practice nurses are ideally suited to foster this development, within the framework for practice offered by the substantive, grounded, middle range theory: Legitimate Influence: the key to advanced nursing practice in adult critical care. Essential elements of the paradigm model in this respect were Leadership, both of

practice and specialist knowledge, founded on the particular attributes of vision and risk taking (Section 5:4:1; Logic Diagram B - Appendix 15). The strategic activity engaged in by advanced practice nurses, which focuses in the restorative elements of caring also demonstrates the importance of nurturing patients towards the consequences of the paradigm model. Restoring was a primary focus of strategic activity and forms the basis of the following discussion.

6:2:3 The Restorative Nature of Strategic Activity

Restoring, represented activity undertaken to ease transition, maintain support and maximise individual function (Logic Diagram 3; Section 5:4:3). These were associated with improving patient care, continuity of care and patient education respectively. Their combination in terms of an intent to restore well being was not evident within the literature. However, the activity which comprised each of these strategic conditions has been represented separately. The purpose of the following discussion will be to integrate these with the results of the current research study.

Strategic activity associated with improving patient care was associated, in this study, with decreasing trauma, crossing traditional boundaries, influencing patient management, effective communication and networking across the interdisciplinary team (Section 5:4:3; Logic Diagram A - Appendix 15). It also required a knowledge of hierarchical systems which required mobilisation or disruption to meet patient need. This links improved patient care to the facilitating intervening condition political awareness. These particular factors combined to ease transition which has been described as a central concept within the discipline of nursing (Schumaker and Meleis, 1994).

Decreasing trauma comprised two aspects of care provision, psychological and physical (Section 5:4:3). Psychological care dominated the results of the present study. It included the involvement of patients and families in decisions regarding options which may be available to them. Examples of this related to the comfort and convenience of a particular wound dressing, the method of securing a tracheostomy

or endotracheal tube, quality of life and end of life decisions. It also involved the mobilisation of social services or charitable institutions to ensure home circumstances were suitable and safe for discharge, and that social isolation was avoided if this was desired by the patient. Psychological elements associated with recovery from critical illness were not prevalent within the literature.

Physical aspects of care which reduced trauma included a reduction in the number of complications arising from critical illness. For example reducing intravenous catheter related infection (Donaldson, 1999) or decreasing the incidence of pressure area formation. Literature associated with the reduction of complications in critical illness often represents the work of individual nursing staff, not necessarily that of advanced practice nurses. The role of the advanced practice nurse would be to articulate the difference made by nursing to the welfare of critically ill patients and develop strategies to achieve this.

The crossing of traditional professional boundaries, both in this study and in the literature, referred almost exclusively to advanced practice nurses undertaking functions previously within the domain of medicine. The debate this inspired has already been alluded to in the introduction to current study and focused on the “*medicalising*” of nursing (Manley, 1996:56). It occurred both in the UK (Manley 1996), USA (Parse, 1993; Mauksch, 1975; Rogers, 1975) and Australia (Sutton and Smith, 1995). It also featured in earlier discussion in this chapter where it was related to sources of conflict (Section 6:2:2). However, to a large extent this is now a redundant debate. Many nurses, not only advanced practice nurses, are undertaking functions formally in the domain of medicine (Allen, 1997). In the field of adult critical care these include inserting venous and arterial cannulae, interpreting chest radiographs, physical examination, weaning from ventilation and managing pain (Daffurn, 1998). The issue, revealed in the results of this study, was not whether a nurse can perform these psychomotor skills in a competent manner, although competence is extremely important (Gee, 1995), but that the performance of a particular skill should benefit the patient and not detract from other patient related responsibilities. Once patient benefit had been established then the decision to instigate the skill or intervention and its evaluation should be within the domain of nursing. This latter aspect may fall into the realm of the advanced practice nurse indicating increased autonomy in practice (Brush and Capezuti, 1997).

Participants in the current study determined the effectiveness of their communication by the ability of patients and family members to understand the reasons for illness, how to cope with residual problems following illness, avoiding future illness or why current treatment may have failed resulting in the loss of a loved one (Section 5:4:3). This emphasis on understanding, identified as a consequence of Legitimate Influence (Figure 5:1; Section 5:4:4), indicated an attempt to participate in "*communicative action*" (Habermas, 1984:285 - 286). Communicative action implies that future activity is negotiated between the advanced practice nurse and the patient/family without the use of power or coercion. It was implied in the model developed by Dunphy and Winland-Brown (1998) and is synonymous with the ethic of care and nurturing, addressed in previous discussion (Section 6:2:2). However, competing tensions were likely to effect this ideal type of communication (Porter, 1998).

In the current study this was evident in the consequence increased efficiency (Section 5:4:4; Figure 5:1), whereby emphasis was placed on decreasing length of stay and complication rates. As a result of this, advanced practice nurses may participate in "*strategic communication*" (Habermas, 1984:289) whereby patients were manoeuvred towards the goals of the nurse or the organisation rather than those which were sought by the individual. It appeared advanced practice nurses may experience some dichotomy in the values which were placed on the purpose and process of communication even if this was not within the consciousness of the individual nurse. This may demonstrate an aspect of the current study which indicates behaviour may be motivated by unconscious inclination, as well as conscious deliberation (Obholzer and Roberts, 1994). As such it suggests a limitation of the theory, symbolic interactionism, where action is promulgated only by conscious thought.

Networking does not feature widely in the literature associated with advanced nursing practice. In terms of the current study it involved developing a resource of hospital and community personnel who actively contributed to the welfare and recovery of patients following critical illness. Integral to this process was the intervening condition, political awareness.

Continuity has been termed a “*seamless web of care*” by the American Association of Critical Care Nurses (AACN, 1995 no page number provided) and was seen as a key feature of advanced nursing practice by the majority participants in the current study. This again demonstrated the emphasis placed on restoring patients following critical illness, demonstrated by the participants in this research. Case management was cited in this study as one method of ensuring continuity of care, and is prevalent within the literature (Egloff Parr, 1996). It involves the identification of a care pathway which standardises the process of care for a particular patient population (e.g. myocardial infarction). The care pathway details the treatment, interventions and tests which need to be performed within a particular time frame. The use of a time frame enables the identification of variances (e.g. door to needle time for the administration of streptokinase). Variances can then be analysed and management altered to improve continuity of care. Analysis of variance is also useful in delineating the most appropriate health professional to deliver timely and effective interventions and has resulted in a number of nurse led initiatives (Malby, 1995). The use of case management has been associated predominantly with the role of the CNS (Mahn and Spross, 1996; Tidwell, 1994). It demonstrates an indirect means of providing enhanced patient stay and improved patient outcome where the impact of the indirect role can be evaluated (Logic Diagram 2). However, nurse practitioners might also find the process of developing care pathways useful in delineating scope of practice and measures of outcome.

The work of Egloff Parr (1996) was also pertinent to the maintenance of continuity as it identified criteria which reflected a proactive response to patient progression following discharge from the ICU. This could be combined with the work of Hravnak (1998) who identified the risks associated with adult critical care inpatient stay and the potential impact of the advanced practice nurse in avoiding further deterioration and progressing recovery from critical illness. These approaches have been combined and an example is provided in Appendix 12.

Many studies have demonstrated the effectiveness of education provided by advanced practice nurses in reducing complication rates and increasing the ability of a person to deal with illness (Brooten and Naylor, 1995; Heslop and Bagnell, 1988; Moyer, 1987). However, the latter studies were not performed in the acute sector and caution should be exercised due to a lack of longitudinal research appraising the

long term impact of patient education. Even so Hravnak (1998), Elliott (1995) and Butterworth and Bishop (1995) all suggest health education and patient teaching are vital components of advanced nursing practice.

It is acknowledged, by this study, that patient education during a period of critical illness, is impossible. Patients are not normally conscious and families are in a state of emotional turmoil. Neither condition is conducive to learning. However, for patients in whom critical illness forms an accepted stage of hospitalisation (e.g. cardiac or vascular surgery) educational strategies can be commenced prior to admission and continued after recovery (Hravnak, 1998; Savage, 1996; Engler and Engler, 1994). All patients who recover from critical illness require some form of education concerning altered functional ability, management of prosthesis and/or enhanced coping mechanisms. Various educational strategies were identified in this study and in the literature (Savage, 1996), the focus of which, in adult critical care, was likely to be risk reduction and health promotion according to the results of the current study (Section 5:4:3; Logic Diagram A - Appendix 15; Figure A - Appendix 14).

In summary, the strategic condition of restoring represented activity undertaken to ease transition, maintain support and maximise individual function. It therefore represented a broader perspective than that currently reflected in the literature where *"restorative care"* refers to the short term goal of restoring stability and the long term goal of restoring maximum health potential (Magdic and Rosenzweig, 1997:209). Legitimate Influence required the exercise of autonomy if the elements integral to restoring, and by association of nurturing, were to be made visible. The results of this research indicated a perceived increase in autonomy was allied with postgraduate education. The effect of which will now be discussed.

6:2:4 The Effect of Postgraduate Education

The effect of postgraduate education was not an intended outcome of this research study. However, the development of advanced practice nurses was and issues were raised concerning the appropriateness of specialist and generalist content in current postgraduate courses (Section 2:1). Questions were also posed concerning the amount and type of experience required before a readiness to undertake postgraduate preparation for advanced practice was evident; and whether the attainment of a postgraduate degree was the only criteria which should be used to indicate an ability to practice at an advanced level. All these issues will now be explored in terms of the results of this study and the literature.

The content of postgraduate courses in the preparation of advanced practice nurses continues to be a topic of discussion, particularly in the UK (Woods, 1997). This stems from the debate identified earlier (Sections 2:1, 6:2:2; 6:2:3) relating to the medical versus nursing focus of nurse practitioners and clinical nurse specialists respectively. Given the redundant nature of this debate (Section 6:2:3), some degree of rapprochement is evident in the attempts of educationalists to develop generic curricula for advanced nursing practice. Generally, these comprise three distinct areas (Woods, 1997; Harper, 1996; AACN, 1995). The first of which has been associated with indirect care activity and labelled, general core knowledge, and includes theoretical structures in nursing, research utilisation, ethics and policy making. The remaining categories are associated with direct care activity and labelled core knowledge for advanced practice and speciality specific knowledge and skills respectively. The former includes advanced physical assessment, physiology and pharmacology. The latter depends, as the title suggests, on a particular area of practice but should have a life course focus, where patient needs are considered over time rather than addressing single illness events. The results of this study indicate that specialist content associated with adult critical care might best be focused in two discrete areas. Firstly, on patient populations at risk of developing critical illness and, secondly, that the needs of patients should be considered in the long term and evaluated through review of patient orientated outcomes (Figure 5:1; Section 5:4:4). There is also some evidence in the literature that practice models (Section 2:4) have been developed specifically to cater for the specialist educational

needs of ACNPs (Ackerman et al, 1996) and CNSs (Moloney Harmon, 1999). However, as demonstrated in this research attributes are still shared (Table 1).

There are three significant areas of omission in the literature associated with curriculum development. Firstly, the impetus for curriculum development appears to emanate from national policy initiatives or a desire to enhance the professional status of nursing (Woods, 1997; Harper, 1996; AACN, 1995), rather than focusing on the needs of patient populations. It cannot be assumed that policy necessarily represents the best interests of the patient as emphasis might be placed on cost containment, rather than provision of the best service.

Secondly, evaluation of educational effectiveness rarely focuses on what has been achieved for patients. Instead, it generally relates to the student experience of the educational process. There is one notable exception to this in the work of Clochesy et al (1994) who suggest that evaluation of the ACNP role should be performed at several junctures. The first stage of evaluation would address the student experience. However, subsequent stages should include evaluation of patient satisfaction. In particular, it is suggested attention should be paid to the accessibility of the ACNP, the provision of adequate information, the co-ordination of care and integration of services, and the adequacy of patient transition. All of which have resonance in the current research (Figure 5:1; Section 5:4:4).

Finally the literature, from the UK, associated with the educational preparation of advanced practice nurses does not differentiate between levels of educational provision (e.g. undergraduate or postgraduate) or levels of practice (customary or advanced). Therefore, it is difficult to establish the difference between those who are educationally prepared to certificate or diploma level and those who are masters prepared, and those who are engaged in customary nursing practice (Section 1:2) and those functioning at an advanced level (Scholes et al, 1999; Audit Commission, 1999).

It can be seen from Table 2 that the participants in this research had undergone numerous forms of postgraduate education, the content of which appeared quite diverse. Yet those who were undertaking, or had achieved, postgraduate

qualifications appeared to enjoy greater perceived autonomy than those who had not (Section 5:4:1). This is in contrast to the study undertaken by Hupcey (1994) who found no statistically significant difference in the role expectations of certificate and master's prepared nurse practitioners. However qualitative research, such as the current study, and research performed by Bousfield (1997) does demonstrate a difference in the perceived autonomy of those who had, or were in the process of attaining, postgraduate education and those who had not. The participants in the phenomenological study conducted by Bousfield (1997) had not undertaken postgraduate education. The results of the study emphasised the prevalence of disempowerment and burn out. Disempowerment referred to a lack of professional autonomy. Therefore, there appears to be some preliminary evidence that postgraduate education may engender increased autonomy in practice, but this does not appear to be related to content or type of degree. It is difficult to establish from the literature and from the findings of the current study what the definitive effect of undertaking postgraduate education is. Therefore, all that can be stated at the current time is that further research in this area may be of merit in determining both the effect, and effectiveness of, postgraduate education in the preparation of advanced practice nurses in critical care.

Another interesting finding of the current research study, absent in the literature, was the lack of influence postgraduate education had on the peer group. The attainment of which did not appear to add to the credibility of the advanced practice nurse (Section 5:4:1). What was of importance to this group was the ability to practice clinically at an advanced level. In order for legitimacy to be established in practice reflection upon clinical experience and skills within the speciality was vital, but this again in it's self was not sufficient. To benefit patients sufficient experience within the speciality was required to recognise the wide range of response patients demonstrate during critical illness. This was also evident in Calkin's (1984) model for advanced nursing practice (Section 2:4). However, what was less clear was how long it would take to develop an ability to practice at an advanced level within a particular speciality. Opinion amongst participants in this study suggested more than five years. The figure of five years, cited by participants, appeared to be based on Benner's (1984) suggestion that it takes in the region of five years to become an expert. It was also accepted by participants that decades of experience would not in themselves result in an ability to function at an advanced level, unless practice was

actively reflected upon. It therefore appeared that postgraduate education and reflective clinical practice form a synergistic alliance which have the potential to produce increased autonomy. Therefore, in terms of this study, the attainment of postgraduate education in itself was not a sufficient prerequisite for an advanced level of nursing practice. Reflection upon experience in practice was also necessary. As Sparacino (1992) stated,

"...graduate study and integrative analysis are essential. Alone they are not sufficient."

(Sparacino, 1992:4)

In summary it appears that postgraduate education may result in feelings of increased autonomy. Although this was not necessarily a function of course content or the type of degree undertaken. A sense of autonomy may instead be a characteristic of the individual or experience, rather than the result of postgraduate education. The attainment of a masters degree was also not a sufficient prerequisite for advanced nursing practice, in itself. This required a synthesis of both formal specialist education and reflective clinical practice over time. However, a precise estimation of the time required in practice prior to undertaking postgraduate education could not be stated. Other factors, arising from the literature which are also worthy of further investigation are the delineation of 'customary' and 'advanced' nursing practice. The effectiveness of educational provision should be appraised in the longer term and take into account the impact of postgraduates on patient welfare and outcome. To develop patient orientated education in advanced nursing practice, curriculum development should be based on the needs of the patient population, rather than professional or policy agendas. These will form the subject of later discussion and recommendations (Sections 6:4:1; 6:4:2, 6:4:3).

6:2:5 The Delineation of Specialist, Expert and Advanced Clinical Nursing Practice

The confusion evident within the nursing profession (Section 2:1), in relation to notions of specialism, expertise and advanced or higher levels of nursing practice, and the emphasis and distinction placed on advanced clinical nursing practice evident within this thesis warrant further discussion. The purpose of which will be to bring some clarity to the terms specialist, expert and advanced nursing practice which are often used interchangeably (Humphris, 2000; Adams et al, 1997). Exploration of the distinguishing features of specialist, expert and advanced clinical nursing practice, within the context of adult critical care, will structure the following discussion.

In the early stages of this research, participants referred to the importance of expertise in clinical practice (Appendix 14 - Figure D). However, as data collection progressed an ability to practice beyond the level of expert was emphasised ... *"they must be experts but does a consultant need to be more than just simply an expert in their speciality and I think they do and I think that's the next leap"* (Participant 27). The genesis of advanced clinical nursing practice was then articulated (Section 5:5:1). Advanced nursing practice in its self was a broader concept, both in terms of the substantive theory presented here, other conceptual frameworks (Moloney Harmon, 1999; Dunphy and Winland-Brown, 1998; Manley, 1997; Ackerman et al, 1996; Shuler and Davis, 1993a; 1993b; Calkin, 1984) and policy definitions (Section 2:1). Advanced nursing practice, in terms of this research, comprised several key areas of activity which included the development and dissemination of knowledge, leadership and strategic activity aimed at enhancing patient stay and improving patient outcome. However, the most essential feature in attaining the credibility to exercise Legitimate Influence was an ability to engage in advanced clinical nursing practice (Figure 5:1; Section 5:5:1). Therefore, advanced clinical nursing practice formed a pre-eminent feature of advanced nursing practice. Specialist practice was not raised by participants, except in reference to their area of practice (e.g. trauma, neuroscience) which was circumscribed by a definitive area of knowledge and skills.

The Shorter Oxford English Dictionary (SOED) (1975) indicates that a specialist is a person who exclusively studies one subject or one branch of a particular subject. An expert is defined as one whose special knowledge or skill causes him to be an

authority. Therefore, in terms of normal usage, the terms specialist and expert connote distinct areas of knowledge and skills which may develop to a stage where the person is deemed to be an authority on a particular subject area.

The term 'advanced' implies being ahead in development, knowledge, progress; ahead of the times. This captures the proactive nature of advanced clinical nursing practice, rather than the "*response-based*" practice of the expert (Benner et al, 1996:148) indicated in the properties of the causal condition Leadership in Clinical Practice (Section 5:4:1; Appendix 15 - Logic Diagram B). However, Benner et al (1996) do suggest that experts anticipate likely future events, but this appears to be limited to specific patients, and has both spatial (geographical) and temporal (focus on short term stability) limitations. Whereas advanced clinical nursing practice, in terms of adult critical care, is characterised by a focus on patient populations, is not confined to a particular geographical area and addresses outcomes in the long term (Section 5:4:1; 5:4:4; Logic Diagram 1).

The work of Benner (1984) depicts levels of nursing practice from novice to expert and is frequently referred to in the literature associated with differing forms of nursing practice (Hamric et al, 1996). The phenomenological study undertaken by Benner (1984), which was also used to establish the competencies of clinical nurse specialists (Fenton, 1985), was performed in the area of adult and neonatal critical care. It is therefore not surprising that the findings have particular resonance within these clinical areas (Goldenberg Klein, 1994). They will, therefore, be used to indicate the progression of nurses from specialist through to advanced typologies of nursing practice in adult critical care in this discussion. However, the work of Benner is not without its critics (Woodall, 2000; Sutton and Smith, 1995; English, 1993; Thompson et al, 1990). The concerns, identified by these authors, relate to the use of intuition. This will be addressed during discussion of expert nursing practice. However, in order to demonstrate progression from specialist through to expert and advanced clinical nursing practice, indicated by the SOED definitions provided above, specialist nursing practice will now be addressed.

Specialist practice relates to a specific area of nursing (Albarran and Whittle 1997; Hamric et al 1996) which in terms of this thesis refers to adult critical care (Section 4:2). In order to attain specialist status a combination of educational preparation and experience within the speciality is vital . Education for specialist practice should contain knowledge which is pertinent to the speciality and enables the nurse to function as a specialist. Areas identified by Roberts-Davis et al (1998) and Albarran and Whittle (1997) are to:

- support clinical judgements from a theoretical knowledge base
- evaluate alteration in the patient's condition
- *evaluate nursing and medical decisions*
- prioritise interventions
- act as a role model
- be competent in patient care

It can be seen, from the last point, that the level of practice to be achieved is that of competent. Competent nursing practice marks the beginning of specialist nursing practice, where knowledge and skills integral to the speciality are honed. Other levels preceding this, in Benner's (1984) typology, are novice and advanced beginner where general principles of nursing practice are applied to the specialist needs of patients. This represents movement towards a specialist level of practice and, for the sake of brevity, will not be addressed here. Competence, within the speciality, is characterised through increased clinical understanding demonstrated in the appropriate use of, and dexterity in, technical skills, organisational ability and the anticipation of a probable course of events in the patient's condition (Benner et al, 1996; Benner, 1984). Understanding the complexity and divergence of patient response is also evident and characterised through a search for broader and more extensive explanations. Emphasis is placed on achieving goals set for patient care.

However, competent nurses seldom identify the relevance of a changing situation, this skill is hampered by the need to collect and organise data collection and achieve goals. Another insight offered by Benner et al (1996) is that some nurses never move beyond this stage. A major impediment to progress is the inability to recognise the individual nature of patient care and a lack of insight into the needs of the patient.

However if a nurse remains in the speciality, and continues to develop insight, development from competent, through to proficient practice may be demonstrated.

Proficiency marks a transition from competent to expert (Benner et al, 1996). It is demonstrated through an increased sense of salience associated with the patient's condition, that is to say, past experience begins to play a part in the interpretation of clinical situations. Practice is no longer ruled by goals set but also through increased sensitivity to the discrete signs of a changing situation. This is usually marked by an emotional response of 'something isn't right' and evidence is then sought to determine causal factors. An increased sensitivity is also evident in relationships with family members of when and how to provide information. A nurse can, therefore, be a specialist working at a competent, proficient and expert level. However, the level of expert, according to normal English usage, is associated with increased authority.

The most prominent feature of expert nursing practice is the use of intuition (Benner, 1984). It demonstrates an ability to know and act without conscious reasoning. It is:

"... a collection of observations that we do not consciously recognise as indicators of specific changes. With experience, some clinical patterns become familiar but are seldom analysed or tested so they remain vague perceptions or 'intuition'."

(Halm et al, 1990:38)

Expert nurses are, therefore, able to instinctively feel an alteration in the patient's condition and respond to this without thinking. Response is immediate, but articulation of the situation is less apparent, demonstrating a highly developed sense of pattern recognition (Benner et al, 1996).

It is this facet of expert nursing practice which has been the cause of considerable criticism within the literature (Woodall, 2000; Sutton and Smith, 1995; English, 1993; Thompson et al, 1990). English (1993) and Sutton and Smith (1995) argue that a definition of intuition should be supplied in order to operationalise the concept. Jasper (1994) questions whether expertise is actually a level of attainment which should be aimed for given the lack of specificity associated with the term, intuition. Thompson et al (1990) also criticise the manner in which the theme of intuition has

been derived by Benner (1984), suggesting that expertise should be defined in terms of individual thought processes rather than in situations. In the light of this, Woodall (2000) suggests that expert nursing practice is also about critical analysis of practice and self regulation through reflective supervision, as well as the contribution of education and experience. It appears that criticism iterated within the literature demonstrates concern that the highest level of practice evident within nursing should be so nebulous. The articulation of advanced clinical nursing practice enables clarification of this issue.

In this study it is claimed that advanced clinical nursing practice is beyond that of expert. That is to say, advanced clinical nursing practice incorporates expert practice, and therefore specialist practice, but moves beyond it. The results of this research demonstrated a qualitative distinction between expert and advanced nursing practice (Section 5:5:1).

Advanced clinical nursing practice was associated, in terms of this study, with algorithmic thinking which suggested a series of possibilities were considered and tested through patient response. Articulation of this thought process was also evident during participant observation in this study and has been noted as a distinguishing feature of advanced nursing practice within the literature (Rolfe, 1998). This marks a transition from expert to advanced levels of clinical practice. The response of the advanced practice nurse is less standardised, as opposed to expert practice. This is because use is made of previous experience particularly in relation to the more unusual presentations of critical illness (Calkin, 1984; Section 2:4). This demonstrates an ability to reflect on practice experience and learn from it. Once a patient's particular problem is identified a proactive response is made which focuses on long term goals and emphasises the restoring aspects of care (Sections 5:4:3; 6:2:3; Logic Diagram 3). A participant in this research also suggested specialist knowledge and skills were utilised outside the geographical confines of the specialist unit (e.g. ICU, CCU, Trauma Unit). This was termed being a "*specialist generalist*" (Participant 31).

It almost appears as though development of the nurse within the field of adult critical care moves through several stages. At the beginning a generalist perspective is taken. That is to say, at the novice and advanced beginner stage, general

knowledge and experience are brought to bear on practice but specialist knowledge and skills are in the process of development. A specialist level of practice is attained once the practitioner is deemed competent. Specialist knowledge and skills are then refined through experience to proficient and expert levels of practice. Expert nursing practice is characterised by intuitive, response based care which is geographically defined, focused on individuals and provides an intuitive reaction to patient need. Advanced clinical nursing practice is distinguished by a move from intuitive response to a more considered analysis of what is happening to the patient, the consideration of a variety of appropriate interventions which are then tested out in practice for effectiveness. More importantly, it is characterised by an ability to articulate the thought process through which the clinical decision was made and communicate this to others. It appears that the delineation of advanced clinical nursing practice, within this thesis (Section 5:5:1), begins to address the concerns cited in the literature, outlined above.

A counter argument to this delineation of advanced clinical nursing practice relates to the addition of yet another level of nursing practice, making a total of six. However, it is obviously important that whichever label is used to denote the highest level of nursing practice it is one which can be articulated and defined in terms of its particular attributes. It might be suggested that intuitive practice is more pertinent to a proficient level of clinical practice and that the characteristics related to advanced clinical nursing practice are redesignated as expert characteristics.

In summary, the terms specialist, expert and advanced appear to be expressions of a developing ability to enhance patient stay and improve patient outcome, through the provision of direct care. Specialist practice infers focus upon a particular client population which, in terms of adult critical care, is geographically defined. It consists of knowledge, skills and attitudes which are refined through experience within the speciality. This process of refinement moves through various stages from competent, through to proficient and expert. At the level of expert, practice is currently characterised through intuitive, response based reaction to patient need, which has been the subject of considerable criticism. The delineation of advanced clinical nursing practice, albeit in the early stages of development, proffers some solution to the criticism levelled at the current depiction of expert practice. The substantive theory, Legitimate Influence, the key to advanced nursing practice in

adult critical care, also allows a distinction to be made between advanced clinical nursing practice and advanced nursing practice.

6:2:6 Summary and Conclusions

The substantive theory, depicted in this thesis, was co-created through both interview, participant and non participant observation, member checking and co-analysis. Participants also represented the three major forms of advanced nursing practice, evident within adult critical care (NP, CNS, CNC). Legitimate Influence, the key to advanced nursing practice in adult critical care was, therefore, grounded within the speciality of adult critical care and the perceived reality of participants. As such it represented middle range theoretical development as opposed to formal or grand theory (Section 3:4). The advantage of this was that it could be operationalised easily to evaluate both the presence and effect of advanced nursing practice in adult critical care (Section 6:4:2).

The substantive, grounded theory Legitimate Influence, the key to advanced nursing practice in adult critical care represented a departure from other theoretical explanations of advanced nursing practice in a number of ways. Pre-eminently it distinguished the importance of attaining credibility through an ability to engage in advanced clinical nursing practice and the development and dissemination of knowledge. Credibility then led to the exercise of Legitimate Influence in Enhancing Patient Stay and Improving Patient Outcome. Various forms of strategic activity were undertaken which emphasised restoring critically ill adults to their maximum potential during recovery and sometimes beyond. Although the elements comprising the condition of restoring (Logic Diagram 3) had been addressed separately within the literature, they had not been combined in the manner presented within this thesis (Section 6:2:3). It is important to note that restoring also related to the relatives and friends of the critically ill, and involved end of life decisions and supporting those who were bereaved.

Other singular contributions to the knowledge base of nursing included the identification of intervening variables which constrained or facilitated the exercise of Legitimate Influence. The former were predominantly associated with conflict, resistance and gender bias and demonstrated the ubiquitous presence of power relationships. The latter were represented by the conditions of political awareness and established values. These conditions identified the activity undertaken to overcome obstacles which stood in the way of enhanced patient stay and improved patient outcome. The different focus of advanced practice nurses in adult critical care, as opposed to that associated with customary nursing practice (Section 1:2), was evident in the emphasis placed on continuity of care over the patient's trajectory of illness (Logic Diagram 1). It was also associated with the recovery, health and well being of entire patient populations and this was demonstrated in the patient orientated consequences of Legitimate Influence (Section 5:4:4).

The sub-roles of expert practitioner, researcher, educator and consultant are often associated with advanced nursing practice in the literature (Hamric et al, 1996). These do represent a limited portrayal of the concept (Section 2:4; 6:1) but their presence was evident within the substantive theory presented in this thesis. Research and education were subsumed within the subcategory, Knowledge Development and Dissemination, as develops knowledge through research and lecturing. Consultancy could be associated with the professional property of empowering other nurses. Education was also evident as the strategic condition, patient education.

Review of the literature associated with the results of the research served to embed the substantive, grounded theory within extant nursing knowledge. It also helped to define and refine key features. Principally these related to the appropriate evaluation of advanced nursing practice in adult critical care, the emphasis placed on an ethic of care and the promotion of, what are often designated as, feminine attributes which nurture individuals towards recovery. Also, on a professional basis the effect of postgraduate education in inculcating autonomy and the delineation of specialist, expert and advanced nursing practice were also deliberated. The conclusions to be drawn from the preceding discussion will now be addressed in turn.

The evaluation of CNSs and appraisal of effectiveness using single measure designs has proved to be ineffectual (Humphris, 2000; Section 6:1). It is almost impossible to demonstrate a causal effect between the activity of one individual and the outcomes of particular patient populations, using quasi experimental designs (Curley, 1998; Rudy et al, 1998; Hanneman et al, 1994). Therefore, it is suggested that because the introduction of advanced practice nurses to adult critical care represents a change to current policy in England, action research should be used to evaluate the impact of this innovation. The appropriateness of this approach lies in the underlying philosophy being one of liberation which is contiguous with an ethic of care and cultural feminism evident in the results of this research (Sections 5:4:2; 6:2:2). It also allows a staged approach to evaluation which enables review of the current situation, identification of key problems to be addressed, activity to be undertaken and the identification of outcomes which would demonstrate the effectiveness or otherwise of the innovation. Following recommendations will indicate how this may be achieved (Section 6:4:2).

The identification of power relationships (Foucault, 1980) demonstrated the constraints associated with the emphasis placed by participants in this research on nurturing, alongside those of cure (Sections 5:4:2; 6:2:2). Attempts to establish this perspective, through direct or indirect approaches (Logic Diagram 2; Section 5:4:1) often met with conflict, resistance and gender bias. These were often most manifest when traditional geographical or professional boundaries were crossed, particularly the latter. Strategic conditions also demonstrated this focus on nurturing through activity associated with easing transition, maintaining support and improving individual function, evident in the strategic condition restoring (Logic Diagram 3; Section 5:4:3).

The key features associated with restoring have been outlined above. However two further elements were also of note in relation to the strategic activity associated with Legitimate Influence. Specifically these were the crossing of traditional professional boundaries and the attempts made to reduce the psychological and physical trauma of critical illness. The crossing of traditional professional boundaries was motivated by a need to expedite patient care and management, resulting in timely and effective intervention. It was not embarked upon with the aim of absorbing the repetitive tasks of other professional groups, particularly those of medicine. Decreasing trauma was

associated with involving patients in decision making, providing information and increasing participation in the process of recovery.

This concludes the patient orientated aspects of the current discussion. That remaining is associated with professional concerns related to postgraduate education, the delineation of specialist, expert and advanced nursing practice and the distinguishing features associated with advanced clinical nursing practice and advanced nursing practice.

In terms of the results of the current research the content of postgraduate educational programmes did not seem to inculcate increased autonomy in participants. This assertion is based on the variety of courses undertaken by participants in the study (Table 2). Increased autonomy was not evident in studies associated with advanced practice nurses who had not undertaken postgraduate education (Bousfield, 1997) or in the participants, in this research, who had not studied at a postgraduate level. It would appear increased autonomy was associated with postgraduate education, but it was impossible to ascertain any particular variable within the educational process which was responsible for this effect.

The delineation of specialist, expert and advanced clinical nursing practice, in terms of this thesis, reflects growth and development within the field of adult critical care. They were not deemed to be mutually exclusive entities. However, some clarification was required as a result of the confusion associated with the three terms within the literature (Humphris, 2000; Adams et al, 1997). A significant contribution to the knowledge base of nursing was the differentiation, made in this discussion, between advanced nursing practice and advanced clinical nursing practice. Advanced nursing practice represents a broad scope of practice, the attributes of which have been outlined in the substantive theory presented in this thesis and other conceptualisations (Moloney Harmon, 1999; Dunphy and Winland-Brown, 1998; Manley, 1997; Ackerman et al, 1996; Shuler and Davis, 1993a; 1993b; Calkin, 1984). It was also associated with the attainment of postgraduate education (Section 6:2:4). Advanced clinical nursing practice represented an essential component of advanced nursing practice. The attributes of which have been outlined in previous discussion

(Section 6:2:5). However, although it required initial educational preparation in terms of specialist knowledge, it was mainly developed through experience within the speciality which has been subjected to critical reflection.

Finally, the primary research question and an initial aim of the research (Section 1:1) were addressed through the delineation of the grounded, substantive theory, Legitimate Influence, the key to advanced nursing practice in adult critical care (Chapter 5). The remaining aims were to explore the socialisation and development of advanced practice nurses. These were manifest in the identification of intervening variables, and the results associated with postgraduate education and the development of advanced clinical nursing practice respectively. An allied intent, at the inception of the study, was to utilise the findings of the research and associated literature to inform the debate regarding advanced nursing practice in the United Kingdom (Section 1:3). However following the devolvment of government in general, and health care in particular, recommendations will now only relate to England (The Scotland Act, 1998; Government of Wales Act, 1998). It is beyond the scope of this thesis to make policy recommendations on an international basis, as it is impossible to keep up with these unless resident within the country concerned. Recommendations will, therefore, relate to research, practice and policy at a national level. Before this, however, the limitations of the study and critical reflection upon the research process will be presented.

6:3 Limitations of the Research Study

The limitations of the current research study will now be reviewed. Primarily, issues arising from various ontological, epistemological and methodological perspectives will be discussed. In the main these are associated with the use of the constructivist paradigm (Section 3:1), the theoretical foundation of symbolic and interpretive interactionism (Section 3:3), establishing the trustworthiness of the data (Section 4:6), the complexity of the analytic processes associated with grounded theory (Section 4:7:1-3), the development of data collection tools (Section 4:3), the mixed sample group (Section 4:4) and the international nature of data collection. The assumptions upon which the study was based have been outlined previously (Section 2:2).

The ontological, epistemological and methodological basis of the thesis was depicted in Chapters 3 and 4 respectively. There are many interpretations of the constructivist paradigm, as Annells (1996:383) has stated postpositivism, critical theory and constructivism:

“are viewed as still tentative and subject to reformulation, with no consensus reached yet about definitions, meanings, and implications”

(Annells, 1996:383)

The substantive theory presented in this thesis, although the subject of co-creation in terms of member checking, co-analysis and the review of preliminary findings by key participants omitted to include the researcher within the process. This was a result of a desire to have the participants answer the research question. This was a naive endeavour as the influence, in the development of theory within the constructivist paradigm, of the researcher cannot be dismissed. The use 'I' (as the first person singular) would also have indicated the participation of the researcher in the co-creation of the substantive theory.

However evidence of a constructivist approach, as delineated by Denzin and Lincoln (1998b) may be found in the formulation of the results chapter. An interpretation of the contribution made by participants has been interwoven into the text. It is also displayed as a whole in the formulation of the conditional matrix (Sections 5:6:1; 5:6:2). Several further issues and concerns arose from this. Firstly, in order to develop a cogent representation of advanced nursing practice in adult critical care the data has been fractured and subjected to interpretation. This may decrease its pertinence from a postmodernist perspective (Charmaz 1995). Also, the development of theory in any guise is considered a redundant activity by postmodernist thinkers (Section 3:1). However, the theoretical constructs developed within the paradigm model, core category, relational propositions and conditional matrix do represent one approach to the constructivism by presenting the nature of reality as a local and mental construction formed whilst acknowledging multiple perspectives regarding reality exist (Denzin and Lincoln, 1998b). The thesis does not claim to have established absolute truth or to represent only one form of reality. Other conceptual frameworks have been acknowledged in earlier discussion

(Sections 2:4; 6:2:1). The aim of utilising the constructivist approach, was rather, to develop consensus concerning the nature of advanced nursing practice in adult critical care which could then provide the basis for future action in England. This will take the form of recommendations for future practice, research, and policy (Sections 6:4:1; 6:4:2, 6:4:3).

The theoretical foundation of grounded theory methodology, interpretive interactionism (Denzin, 1989a) prompted consideration of the influence of the macroprocesses of power, gender and culture upon advanced nursing practice. This was evident in the intervening conditions conflict, resistance and gender bias, and discussion within this chapter (Section 6:2:2). The microprocesses of interpersonal interactions evident in symbolic interactionism, although criticised in the postmodernist literature (Charmaz, 1995) because it does not address the abuse of power within relationships, nevertheless revealed the essential nature of advanced nursing practice. This was reflected through the relationships developed by advanced practice nurses and their patients, in order to maintain support, promote independence and ease transition (Section 5:4:3; Logic Diagram 3). The criticism levelled at symbolic interactionism by postmodernists for its concentration on the microprocesses of interpersonal relationships may possibly represent a masculine orientation and preoccupation with power rather than one which represents a female orientated ethic of care.

Various methods were used to engender a process of co-creation, which underpins the epistemology of the constructivist paradigm. Evidence for this is most readily found in the feedback gained from key participants (Appendix 9), discussion with participant 30 following participant and non participant observation, co-analysis and member validation (Section 4:6). The emphasis placed on establishing the trustworthiness of the results, using the methods outlined above, has been the subject of criticism (Sandelowski 1993; Section 4:6). This concern with rigour might be said to place the current study outside the constructivist paradigm. However, the process of challenge and defence which characterised discussion associated with the establishment of trustworthiness was both invigorating and enlightening. It allowed a number of different lenses to be levelled at the data which encouraged "*thick description*" (Denzin, 1998:324; Section 4:1) and avoided premature closure.

The process proved invaluable in the development of the substantive theory - Legitimate Influence - the key to advanced nursing practice in adult critical care.

The methods used in grounded theory were the subject of critique in Section 3:2. Personal experience of these, during data collection and analysis, demonstrated that although the process of constant comparative analysis was very challenging it produced in depth scrutiny of the data which would not have resulted without the guidance supplied by Strauss and Corbin (1990). The analytic process was found to be one of liberation rather than constraint.

The development of the first interview schedule (Appendix 2) demonstrated a desire to control data collection and an over reliance on the characteristics of symbolic interactionism (Appendix 6). It also demonstrated a modernist (Section 3:1) rather than a constructivist orientation to the research study and reflected inexperience in grounded theory methodology and data collection abroad. As experience was gained less and less control was attempted (Appendices 3 and 4) although the developing theory still guided sampling. Therefore, later data collection may well be more reflective of a constructivist approach than was evident in the earlier stages of data collection.

However, the use of symbolic interactionism as a basis for the construction of the first interview schedule did engender questions which would not otherwise have been asked particularly in relation to the construction of an identity as an advanced practice nurse, responses to unwelcome labelling and the purpose and consequences of the role. Growing confidence in the method, and experience of the constructivist paradigm, was also demonstrated in the rejection of a 'check list' to collect participant or non participant observation data. Reflection of the developing theory prior to and during participant and non participant observation provided more opportunity for questioning and challenging both myself, the participant, and discussion during member validation and co-analysis. Again the use of informal interviews following participant and non participant data collection and member validation helped in challenging assumptions during the process of constant comparative analysis.

The mixed nature of the sample group might be considered a limitation if a separatist stance was taken in relation to advanced nursing practice roles in adult critical care. That is to say only one role title (e.g. CNS) represents advanced nursing practice. Interestingly, Offredy (2000) has demonstrated how advanced practice nurses themselves often use role titles interchangeably. It was felt inappropriate to restrict the potential representation of advanced nursing practice in the light of the research question asked. Although this is the first research study to mix roles within the sample group. In the end only two major differences were evident between the groups, although these might be of great importance in terms of actual role performance. These were the indirect care role of many, but not all, CNSs and CNCs; and the direct interventions made by NPs (Logic Diagram 2). Leadership was also more evident in the CNS/CNC group (Section 5:4:1).

Finally, the international nature of the sample group may be criticised. It might be suggested that naive cross cultural comparison would make the findings of this study irrelevant to England. A superficial view of advanced practice roles in nursing might indeed suggest that roles do differ between countries. However, it was demonstrated within this study that this only appeared to be the case if health care policy was considered in isolation. Indeed, even in this area there were more similarities than differences given the concentration on cost containment prevalent in the UK, Australia, New Zealand, Canada and the USA despite different health care delivery systems. What did not differ between countries was the essentially personal relationship between advanced practice nurses and their patients, and the interpersonal structures created through strategic activity. To ensure cultural or political influences did not skew the findings key participants (Appendix 7) were invited to comment on the preliminary findings of the study (Ball, 1999). No major discrepancies were noted (Appendix 9).

In summary, as with any research, the research study presented within this thesis can be the subject of criticism depending on the world view of the reader, in relation to personal ontology and epistemology. However, the conduct of this research study has required the negotiation of a steep learning curve in terms of the paradigm and methods employed. Greater understanding of these has now been achieved. In particular, this was evident in the debate regarding the paradigmatic spectrum (Section 3:1) and the differing ontologies, epistemologies and methodologies of

Glaser (1998; 1992) and Strauss (Strauss, 1993; Strauss and Corbin, 1990) (Section 3:2). The process of constant comparative analysis was also challenging, but the process described by Strauss and Corbin (1990) did allow for in depth exploration of the data. The process of establishing the trustworthiness of the data involved provocative discussion and resulted in the portrayal of a substantive theory which was co-created and therefore grounded in the perceived reality of individual participants. However, as indicated by Strauss (1993) all human activity is subject to change and alteration. Therefore the product of research is curtailed by both temporal and spatial attributes. As such, the product of this research, the substantive theory Legitimate Influence: the key to advanced nursing practice in adult critical care represents only a tentative portrayal of reality. As such, the following recommendations for practice, research and policy should be treated with caution.

6:3:1 Transferability of the Substantive Theory

The formulation of the substantive theory presented was derived from the field of adult critical care. However, feedback from colleagues outside the arena of adult critical care following conference presentations (Appendix 11) indicated the potential for transferability to other areas of nursing. Particular elements of the paradigm model which were considered pertinent to other areas of nursing practice included:

- the emphasis on enhanced patient stay and improved patient outcome rather than professional aspiration
- the need for practice leadership
- the importance of credibility and advanced clinical nursing practice in achieving this
- the relevance of both the intervening conditions and consequences to the performance and evaluation of the advanced practice role

It appears that aspects of the substantive theory; Legitimate Influence: the key to advanced nursing practice in critical care may have utility in other areas of nursing practice. It is hoped that transference outside the speciality of adult critical care

might be possible in the future. This would, however, be dependent upon nurses working in other areas to evaluate the potential transference of the substantive theory presented in this thesis to other areas of nursing practice. Recommendations for practice, research and policy follow but these will focus on the speciality of adult critical care only. They also only reflect a national perspective, given the difficulties associated with access to international policy development.

6:4 Key Recommendations

The appointment of nurse consultants in adult critical care areas, in England (Making a Difference, 1999; Health Service Circular, 1999a), provides a unique opportunity for the utilisation and evaluation of advanced nursing practice based on the substantive, grounded theory presented in this thesis. Two participants (30 and 33) have already been appointed as nurse consultants. This suggests the sample criteria chosen were representative of an advanced level of nursing practice (Section 4:4).

The decision to establish the advanced practice role in the UK indicates agreement concerning title and implies some reduction in the confusion surrounding the concept of advanced nursing practice described at the beginning of the thesis (Section 2:1). However, the function and consequences of the role have yet to be established. The patient orientation of the theory, Legitimate Influence: the key to advanced nursing practice in adult critical care, provides the basis for these elements and marks a departure from models of advanced nursing practice which currently focus on process, rather than outcome (Moloney Harmon, 1999; Dunphy and Winland-Brown, 1998; Manley, 1997; Ackerman et al, 1996; Shuler and Davis, 1993a; 1993b Calkin, 1984). This orientation, to both patients and outcomes, provides the potential for nurse consultants to demonstrate their impact on the welfare and outcome of critically, and potentially critically, ill adults. Leadership, in both practice and area of specialist knowledge, also allows for the contribution of nursing to the welfare of the adult critically ill population to be made evident through the development and dissemination of knowledge.

The preceding discussion has indicated the importance of evaluation in demonstrating the impact of the role (Section 6:2:1). The impact of power relationships upon the performance of the role and the apparent reduction of subservience at an advanced level of nursing practice are also worthy of future exploration (Section 6:2:2). Another feature arising out of the coalescence of intervening conditions and strategic activity was the foundation of advanced nursing practice within an ethic of care. This marks a departure from the usual focus of critical care on the curative aspects of management and therefore also warrants further development. The restorative aspects of strategic activity and the suggested consequences also form a major area for future exploration. Two unforeseen consequences also emerged which warrant further consideration in terms of both practice and policy initiatives. These were the effect of postgraduate education and the delineation of expert and advanced clinical nursing practice. The following sections will now propose recommendations in relation to practice, research and policy.

6:4:1 Recommendations for Practice

The development of the substantive, grounded theory, Legitimate Influence, the key to advanced nursing practice in adult critical care predicates several recommendations in relation to practice. Predominantly these are associated with the synergistic alliance of both care and cure in restoring critically ill patients. Other recommendations which arise out of the findings of this research relate to the future introduction of clinical professorial appointments and restructuring the present hierarchy within the adult critical care. These will now be presented and summarised in section 6:5.

One of the unique findings of the grounded, substantive theory generated by the research undertaken for this thesis was the strategic condition of restoring the critically ill patient to a former level of health, or the best which can be achieved given the nature and severity of illness sustained. This was achieved through improving patient care, ensuring continuity of care and the provision of education which all contribute to maintained support, ease of transition and improved individual function (Logic Diagram 3). The maintenance of support is also extended to those close to the patient, particularly when bereavement is likely. The main

recommendation for practice focuses on this aspect of Legitimate Influence: the key to advanced nursing practice in adult critical care. The evidence to support the following recommendation may be found in section 5:4:3 and Logic Diagram A (Appendix 15).

It is therefore recommended that an emphasis should be placed on the long term outcome of patients from critical illness. This differentiates advanced nursing practice from the customary focus of nursing practice, which concentrates on short term goals and haemodynamic and respiratory stability (Section 1:2). Strategic activity should be based on improving patient care which requires the crossing of traditional professional boundaries with the aim of reducing the trauma of critical illness, rather than merely undertaking skills which other health professionals find irksome. To achieve this effective lines of communication need to be developed and networks established to ease the transition of patients from critical illness towards health. The effectiveness of these should be measured by what is achieved for the individual patient population, in relation to projected patient orientated outcomes. Influence over patient management may be direct or indirect depending on the needs of the patient population. However, it is essential that strategic activity is evaluated in order to demonstrate the impact of the role. The operationalisation of this aspect will be outlined in the following section. Another key feature of restoring is continuity, providing timely and effective intervention. Again the needs of the patient population need to be taken into account, as maintaining continuity may require concentration on a high risk group (e.g. formation of tracheostomy), follow through to discharge in order to reduce the incidence of deterioration (Appendix 12) (McQuillan et al, 1998; Wallis et al, 1997) or, in terms of the chronically critically ill (heart failure) in to the community (Dahl and Penque, 2000; Dahle et al 1998). Patient education should appreciate the needs of individual patients and target realistic aims. Various educational strategies may be utilised but should emphasise, in the first instance, enhanced coping mechanisms and the day to day management of problems. Problems include those which might be predicted, in terms of the type of critical illness sustained and those which the individual patient identifies.

The strategic activity involved in restoring, and the conflict and resistance experienced by participants in this research indicate the presence of a nurturing perspective towards recovery from critical illness, based on an ethic of care. The

following recommendation outlines the promotion of the attributes associated with these concepts in relation to adult critical care.

It is recommended that leadership, based in clinical practice, should be founded upon a recognition of the need for consistency and continuity. A move towards a holistic approach to recovery which includes the patient and family in decision making and makes use of language which enables comprehension. The focus should be on what can be achieved for patient populations throughout illness and recovery, rather than the attainment of short term stability within a geographically defined area.

These recommendations should result in an improved critical care service, where emphasis is placed on the restorative elements of care as well as those of cure. The potential for conflict and resistance remains as the elements associated with restoring emerge. This may be particularly evident where traditional professional boundaries are crossed in order to expedite patient care and management. Therefore the development of priorities will be necessary. Thought should also be given to the involvement of the whole critical care team in the development of the service provided for critically ill patients. Practice development should not be the province of nurses alone. Examples of overcoming resistance have been outlined previously and involve role modelling, developing relationships, negotiation and valuing the contributions of others.

It has also been suggested, by participants in this research, (Appendix 9:7) that joint academic/practice appointments be established. This again distinguishes the difference between customary or expert nursing practice and advanced nursing practice within the field of adult critical care (Sections 1:2; 6:2:5). The aim of these appointments would be the development and dissemination of knowledge derived from the speciality of adult critical care, which is a key feature of the paradigm model derived from this grounded theory study. Evidence of this activity (Section 5:4:1) should be demonstrated through research, publication, lecturing and conference presentation. A future possibility is the development of clinical chairs of nursing which could be derived from the nurse consultant role in England (Dunn and Yates, 2000). A key feature of this role would be to articulate the difference between medical and nursing practice in terms of what can be achieved for patients. The focus of which research will be outlined in the following section.

Another departure from the established order of practice in adult critical care, and a key recommendation from this research, is the development of a new structure for personnel working with critically ill patients. The recommendation from this research is that both the nurse consultant and medical director of adult critical care services form an alliance which gives strategic direction to the service. It should also enable the appropriate education and development of those training in the speciality area. This is not to introduce a management orientation to the advanced practice role, but rather to establish a sense of direction in terms of what the service aims to achieve for specific patient populations, together with methods of securing enhanced care and improved outcome for the critically ill. However, management should be kept informed of strategic aims and of progress made, in order to demonstrate the value of the role. The introduction of such an alliance would substantially increase the potential for the ethic of care and the attributes of nurturing to be established for the benefit of the critically ill, alongside those of cure.

In summary, recommendations for practice focus on four specific areas. Firstly the focus of strategic activity being on restoring the patient so that they may achieve their own individual potential following critical illness. The promotion of an ethic of care and an equal value placed on this, alongside that of cure. The establishment of clinical chairs within nursing which will begin to develop the knowledge base of the profession from a practice, rather than, an academic base. Finally, a change to the current arrangement of personnel where those who maintain a consistent presence within critical care take joint responsibility for the strategic direction of the service and the development of all those rotating through the speciality gaining experience.

6:4:2 Recommendations for Research

Five major areas for research have arisen out of this thesis. The first represents the importance of evaluating advanced nursing practice in adult critical care. To meet this end suggestions for the future evaluation of the role will form the first recommendation. Secondary areas for research relate to the decreasing subservience of some of the participants in this study, in relation to their medical colleagues; the apparent difference in autonomous practice demonstrated in those who held postgraduate degrees, delineating expert and advanced clinical nursing practice and finally establishing the focus of critical care nursing research.

The introduction of nurse consultants into adult critical care in England indicates a change in the current delivery of services. Evaluation of the role is therefore imperative. Girouard (1996) suggests that evaluative research should be undertaken within a positivist paradigm. This is a possible reason why current research in this area has only dealt with one or two variables, from a mainly mechanistic perspective, such as length of stay or earlier discharge from ICU (Lipman 1988); or concentrates only on process attributes such as the domains and dimensions of advanced nursing practice identified in the models described earlier (Scherer et al, 1994; Tarsitano et al, 1986; Table 1). It has also been unsuccessful in demonstrating the value of advanced nursing practice in terms of enhanced patient stay and improved patient outcome (Section 6:2:1).

Therefore, it is recommended that action research be used to evaluate the effectiveness of advanced nursing practice in adult critical care, as presented in this study. The operationalisation of Legitimate Influence: the key to advanced nursing practice in adult critical care represents a change to current practice and action research methods are ideally suited to the monitoring of the change process. Action research methods would also allow for the comprehensive appraisal of the role and allow both qualitative and quantitative data to be gathered and analysed. The methodology is underpinned by critical science (McCutcheon Jung, 1990) which has, as a guiding principle, the liberation or emancipation of the individual. In many action research studies in nursing, 'individual' refers to the nurse (Holter and Schwartz-Barcott, 1993) but use of the current grounded theory developed from this study, as a framework for action, could lead to the emancipation of critically, or potentially critically, ill patients and their families. That is to say the service could become patient orientated, rather than professionally dominated, an issue raised earlier in the introduction to the thesis (Section 1:1). Action research (Meyer, 1995; 1993) reflects the process and outcome of change. It is concerned with doing research *for* and *with* people rather than *on* people, as in the positivist paradigm, and involves practitioners and patients/families identifying their concerns and exploring ways of overcoming real issues within the context of everyday practice and so appears pertinent to the current study. This approach is also congruent with the ethic of care and cultural feminist perspective of advanced nursing practice in adult critical care described earlier (Section 6:2:2).

Action research usually reflects several stages of development and these will now be presented in relation to the proposed recommendation to evaluate advanced nursing practice in critical care, utilising the substantive theory presented in this thesis. The first stage would incorporate analysis of prevailing conditions, utilising the paradigm model. This would enable identification of the problems associated with causal, intervening, strategic or consequence conditions. For example a lack of leadership may be apparent, or a long term focus on the recovery of critically ill patients may not be taken or conflict may preclude productive working relationships. The delineation of problems associated with the provision of critical care services would enable appraisal of progress made, when the proposed action research study is complete.

Following analysis of the problems encountered in practice the second stage would involve operationalization of the theory - Legitimate Influence - the key to advanced nursing practice in adult critical care through activity associated with both causal and strategic conditions (Sections 5:4:1; 5:4:3). Intervening conditions would also need to be analysed for their ability to facilitate or constrain strategic activity. Priorities for action would then be negotiated with the interdisciplinary team, as members will be involved in the change process and need to develop ownership of innovations to current practice. Following the implementation of strategic activity consequences would be evaluated from a patient perspective and consideration of the relational propositions. This forms the third stage of the action research study. Secondary effects would involve professional outcomes in terms of collaborative practice and increased visibility.

The second area worthy of further investigation involves the apparent reduction in the subservience demonstrated by some advanced practice nurses towards medical colleagues. This change is also apparent in the work of Lewis et al (1990), although disputed by Mackay (1995). It is possible a more collegial relationship will develop and a comparative study of types of communication between advanced practice nurses, nurses working with a customary focus in critical care (Section 1:2) and medical consultants may bear witness to this development.

A surprising finding within this study has been the difference noted in the practice of those participants who held a postgraduate degree, and those who did not, in terms of their perceived autonomy in clinical practice. As stated earlier, exploration of this issue was not an aim of the current study nor was it pursued in great depth.

Therefore the investigation of perceived and actual autonomy of those in advanced practice roles who do not hold or are not working towards a higher degree, and those who do, may be of interest. This would be particularly relevant to those involved in the postgraduate education of advanced practice nurses. The findings of this study, as noted earlier in the thesis, are different to previous research in the area (Woods, 1999). Increased autonomy, as indicated earlier (Section 6:2:4), may in fact represent the experience and maturity of the individuals who participated in this study compared to those of Woods (1999; 1998; 1997). Given these discrepancies further exploration of the topic area appears necessary.

The ability of some participants to articulate the difference between expert and advanced clinical nursing practice also indicates a possible need for further delineation. However, the addition of a sixth level of practice, to Benner's (Benner et al, 1996; Benner, 1984) earlier classification does appear somewhat *superfluous*. It is also questionable whether the distinctions noted by Benner (1996; 1984) are in any way absolute. Broader bands of practice may be better able to classify the differences between levels of nursing in terms of observed differences and abilities. It is therefore recommended that research be undertaken to reclassify levels of nursing practice with the aim of achieving greater clarity, particularly following the introduction of nurse consultants in the context of adult critical care, in England.

Finally, the development and dissemination of knowledge requires the focus of nursing research in adult critical care to be made evident. There is a surfeit of research that explores the nurse's perspective in the care of the critically ill. There is little which demonstrates the impact of nursing or nurses on the patients' experience or outcome from critical illness. This focus needs to be established and is within the domain of advanced nursing practice as presented in this thesis. Innovations of this kind are not without difficulty given the dominance of the medical profession in critical care practice. It is, however, possible to delineate the difference between the research focus of medicine and nursing, in the field of adult critical care with the aid of an example from practice.

Weaning from ventilatory support provides an example of the different emphasis placed on knowledge development in medicine and nursing, although modes of inquiry are not mutually exclusive. Medicine tends to take an objective, mechanistic stance as demonstrated in the work of Butler et al (1999) where a systematic review

was undertaken to evaluate the effectiveness of various weaning techniques. These included use of the 'T' piece, Synchronised Intermittent Mandatory Ventilation (SIMV) and pressure support. Weaning was defined as a gradual process required after ventilation for more than 72 hours or failure to spontaneously breathe after 24 hours. Out of a possible 667 potentially relevant reports, four met the selection criteria imposed by the systematic review. The conclusions indicate that none of the techniques were superior, although SIMV modes tended to protract the process of weaning. The authors concluded that:

"the manner in which the mode of weaning is applied may have a greater effect on the likelihood of weaning than the mode itself".

(Butler et al, 1999:2336)

This places the effectiveness of weaning within the discipline of nursing, within the ethic of care referred to earlier in the discussion and within the domain of nursing research. In research performed by Jenny and Logan (1992:254) the process of *"knowing the patient"* was a key concept associated with successful weaning. Within the study nurses demonstrated their knowledge of both causal, contextual and intervening conditions which promoted or hindered the weaning process i.e. *"the manner in which the mode of weaning is applied"* (Butler et al, 1999:2336). Strategic activities were selected to promote independence from the ventilator. These included pain control, effective communication, gaining trust, showing concern and included judgements related to the patient's readiness to wean, patient resources and the judicious use of work (weaning) and rest (increased ventilatory support). Kollef et al (1997) also found that nurse/respiratory therapist led weaning from ventilatory support was superior to that which was physician directed.

These examples provide direction for the future development of nursing research which is patient orientated. It is recommended that nursing research in adult critical care should focus on the effectiveness (or otherwise) of nursing interventions which are based on working with individual patients towards recovery from critical illness, as demonstrated in the research of Jenny and Logan (1992). In particular this research has identified the lack of research associated with psychological recovery from critical illness. The role of the advanced practice nurse would be to initiate and

co-ordinate research of this nature with the aim of developing knowledge for critical care nursing. This would make evident the contribution of nursing to the recovery of critically ill patients.

In summary, the key recommendation for research is associated with the evaluation of advanced nursing practice utilising an action research framework based on the substantive, grounded theory presented within this thesis. Secondary topics, worthy of further exploration, relate to changing interprofessional relationships within the context of adult critical care, the effect of postgraduate education and the development of a simplified classification system which includes advanced nursing practice. Finally, the development of patient focused research which begins to make evident the contribution of nurses to the recovery and outcome of patients from critical illness is also within the domain of the advanced practice nurse and needs to be established.

6:4:3 Recommendations for Policy in England

Recommendations refer only to England because, as indicated earlier, it was not possible to continuously monitor policy development in all the countries where data were collected. It was also the intention of the research study to use the results to inform the debate concerning advanced nursing practice within the UK (Section 1:3). These will now only refer to England, due to the devolvement of government to Scotland and Wales.

Policy development, associated with the topic of advanced nursing practice, in the United Kingdom appears to have taken two distinct paths. Firstly, that of the government, which represents a patient perspective. Secondly, that taken by the UKCC which represents a professional orientation. The former is marked by innovation whilst the latter represents tortuous progress in the regulation of the concept. The position of the UKCC, at the inception of the study, has already been outlined in section 2:1. Developments which took place during the conduct of this research, and the current position of the UKCC, will now be presented and recommendations for future policy development made.

The introduction to the thesis indicated the increased emphasis placed on patient welfare within government policy (Section 1:1). In the context of critical care the discrepancies of care delivery between Trusts were demonstrated by the Audit Commission (1999). The process of improving the services offered to patients and their families has commenced (NHSE, 2000; Review of Adult Critical Care Nursing, 2000). To which the findings of this research, particularly in the need for improved continuity of care and the introduction of nurse consultant led outreach teams, has already contributed.

One especial issue remains outstanding. This relates to the role of the UKCC in determining the effect of advanced nursing practice upon patients and families. Thus far, policy initiatives in relation to the regulation, and therefore the development, of advanced nursing practice have been as Walsh (1999:2) states *"shipwrecked on a reef of (their) own making"*. Castledine (1998) has now acknowledged the confusion caused by the term 'specialist practice' representing a level rather than an area of practice. The confusion caused by this has already been alluded to in section 2:1, but terms continue to be used interchangeably (Humphris, 2000).

In 1997, one year after the research presented in this thesis commenced, the UKCC decided it was inappropriate to set standards for advanced nursing practice. Therefore development of nurses to an advanced level was curtailed. However, following a review of the regulation of nurses, health visitors and midwives (JM Consulting, 1997) which recommended the identification of outcome and competency measures, and subsequent support of this review by the government (Health Service Circular, 1999b) work is now being undertaken to develop a draft descriptor and establish standards for higher level practice (UKCC, 1999a; 1999b; 1999c; 1999d; 2000). No delineation has been made by the UKCC between advanced and higher levels of nursing practice. This is unfortunate given the ubiquity of the former term.

The draft descriptor and standards were circulated in Spring 1999 (UKCC, 1999a). These were reported to have been well received by the profession (UKCC, 1999b; 1999c), and the UKCC should publish the definitive report in 2001 (UKCC, 1998c). However, in their draft form they do not as yet reflect outcomes and competencies

which may be readily evaluated, as required by JM Consulting. The paradigm model (Figure 5:1, Section 5:5:1, Table 5) developed from this study does provide a basis for the evaluation of outcomes, in the area of adult critical care (Table 5). It also establishes the prerequisites required for advanced nursing practice, or Legitimate Influence, to be established so that outcome evaluation might take place (Section 5:4:1, Appendix 15 Logic Diagram A).

It is therefore recommended that the substantive theory, Legitimate Influence, the key to advanced nursing practice in adult critical care be considered, by the higher level practice working party, as a framework through which structure, process and outcome variables may be derived. This would serve two purposes, both of which have resonance with the report submitted by JM Consulting (1997). Firstly, evaluation of advanced or higher level nursing practice could be patient orientated and comprise both structure (causal conditions), process (strategic conditions) and outcome variables (consequences), rather than concentrating solely on process variables. Secondly, the delineation of specialist, expert and advanced clinical nursing practice could be used to derive competencies for practice. In the first instance, the theoretical framework (paradigm model) could be used within the province of critical care as a pilot study. If successful, it might then be disseminated to other areas of nursing practice. To this end, contact has been made with the new Director for Policy Development at the UKCC.

6:5 Summary of Recommendations

A profusion of recommendations have been proposed above. To ensure clarity and increase the potential utility of the substantive theory presented in this thesis, these will now be summarised.

- Recommendations for Practice

⇒ Strategic activity should concentrate upon restorative aspects of critical care nursing which are patient orientated and have a long term focus.

⇒ Leadership in clinical practice should focus on the promotion of an ethic of care, in promoting the recovery of adult critically ill patient. A balance should be evident between both care and cure in the management of the critically ill.

⇒ Future development of the advanced practice role, in terms of knowledge development and dissemination, should produce professorial clinical chairs in critical care nursing. The aim of which will be to develop the knowledge base of nursing from the reality of practice in adult critical care.

⇒ The strategic direction of critical care services should be the responsibility of senior, permanent members of staff currently engaged in clinical practice e.g. the medical and nursing consultant.

- Recommendations for Research

⇒ The role of the nurse consultant in adult critical care should be evaluated using the grounded theory: Legitimate Influence: the key to advanced nursing practice in adult critical care and action research utilised as the appropriate mode of inquiry.

⇒ A comparative study should be undertaken to ascertain if there is any difference in the type of communication engaged in between medical staff, advanced practice nurses and nurses working at a customary level of practice in adult critical care.

⇒ The effect postgraduate education has on perceived and actual autonomy in practice is worthy of further exploration.

⇒ A reclassification of different levels of nursing practice is required in order to simplify the process of progression and development.

⇒ A patient focus to nursing research in adult critical care needs to be established, which begins to make the contribution of nursing to the recovery and outcome of critically ill patients evident. This is within the domain of advanced nursing practice and will contribute to the formation of professorial clinical chairs.

- Recommendations for Policy Development

⇒ Utilisation of the substantive, grounded theory should be considered by the UKCC as a framework for evaluating advanced or higher levels of practice.

6:6 Final Summary and Conclusions

A preliminary review of the literature and consideration of the rationale, scope and context of the proposed research led to a number of conclusions being drawn at the inception of the thesis. Primarily, these related to the confusion within the literature and policy documents concerning the nature of advanced nursing practice. This was particularly evident in the United Kingdom, where few advanced practice roles within the context of adult critical care remained. Extant models of advanced nursing practice maintained a separatist stance in general, portraying nurse practitioner (Dunphy and Winland-Brown, 1998; Ackerman et al, 1996; Shuler and Davis, 1993a, 1993b), clinical nurse specialist (Moloney Harmon 1999) or nurse consultant roles (Manley, 1997). They had been derived for a number of reasons. Predominantly these related to curriculum design (Moloney Harmon 1999; Ackerman et al, 1996), enabling administrative understanding of the role (Calkin, 1984) and practice development (Manley, 1997). Both the literature and theoretical explanation of advanced nursing practice led to considerable debate concerning the nature of advanced nursing practice and whether the introduction of nurse practitioners had led to the “*medicalising*” of nursing (Manley, 1996:56). The contention, made by many nurse practitioners, that their practice remained within the domain of nursing was not helped by the considerable amount of research undertaken to compare the effectiveness of physicians and nurse practitioners (Mundinger, 2000; Rudy et al, 1998; Hill et al, 1994). Dispute was also evident, particularly in the UK, concerning the attainment of postgraduate education. The controversy related to whether advanced nursing practice could be the sole result of postgraduate education, what content was appropriate and whether it was necessary at all (UKCC 1996; 1994).

As a consequence of these arguments it was decided that the nature of advanced nursing practice should be explored by including the three main forms of advanced nursing practice extant at the beginning of the study. These were nurse practitioners, clinical nurse specialists and clinical nurse consultants. It was also

necessary to restrict the scope of the study to the speciality of critical care, in order to draw appropriate conclusions from the data. An international perspective also had to be taken due to the paucity of data available in the United Kingdom, within critical care. The debate outlined above also derived two of the main research aims. These were to explore the development of participants in the study, both from an educational and an experiential perspective, and to derive a model of advanced nursing practice which portrayed the essence of advanced nursing practice rather than one particular facet. The socialisation of advanced practice nurses was also absent from the literature. Yet, the difficulties encountered in undertaking any form of innovative practice must have an impact on the role. This, therefore, gave rise to the third research aim. Overall, the intent of the thesis was to inform the debate within the UK and establish a framework for future action (Chapters 1 & 2).

Grounded theory methods, within the constructivist paradigm, were used to answer the research question and aims (Chapters 3 & 4). As a result a substantive, middle range theory was developed which was grounded in the experience of the participants (Chapter 5), and was entitled, *Legitimate Influence the key to advanced nursing practice in adult critical care*. The component parts of which also revealed key elements associated with the development and preparation of advanced practice nurses and the factors which constrained or facilitated their activity.

The results portrayed in the thesis should, as with all research, be treated with some caution (Section 6:3). It was not the aim of the research to establish a definitive model but, as indicated above, to *provide a basis for future action within the UK*. It was accepted that theory extrapolated through the use of grounded theory methods resulted in a tentative rendition which is subject to both spatial and temporal elements. Criticism may also be levelled at the research process depicted in this thesis, depending on the world view of the reader. In particular such criticism could be pointed at the emphasis placed on establishing the trustworthiness of the data. Some would argue this was inappropriate in a study which purports to be undertaken within the constructivist paradigm. However, this was necessary given the scrutiny with which the thesis would be judged.

Given the limitations outlined above, the final conclusions to be drawn from the thesis lie in the foundation it provides for future action (Chapter 6). The primary intent of the research was to inform debate within the UK. The conclusions to be

drawn however, now only relate to England due the devolvment of government to the countries of the United Kingdom (Scotland Act 1998; Government of Wales Act, 1998).

The substantive theory, Legitimate Influence, the key to advanced nursing practice in adult critical care, provides a basis for the evaluation of the advanced nursing practice. To this end an action research project has been proposed. Action research has been chosen in particular because the philosophical basis of this approach is contiguous with that of advanced nursing practice as presented within this thesis. That is to say it shares the attributes of cultural feminism. The theory allows the causal (structure), intervening (process), strategic (process) and consequence (outcome) conditions to be considered and as such is the first theory to provide both a portrayal of advanced nursing practice, albeit restricted to adult critical care at present, and a framework for evaluation. It is also the first theoretical framework to portray the importance, and source, of credibility through which advanced nursing practice might legitimately influence enhanced patient stay and improved patient outcome. These latter elements of the theory also mark a departure from former theoretical constructions because it demonstrates the centrality of the patient and the focus of advanced nursing practice in adult critical care, particularly in terms of strategic activity and the consequences of this.

The cocreation of the substantive theory has also led to some consensus concerning the debate associated with the function and purpose of nurse practitioners and clinical nurse specialists/consultants outlined above. It can be seen from the results of the study that emphasis was placed on two different elements by the two groups. Clinical nurse specialists/consultants stressed the importance of leadership, whilst nurse practitioners were immersed in the delivery of direct care and management. However, in practice many of the participants in this study reflected an emphasis on what could be achieved directly for patients, despite the label attached to their role. Therefore consensus appears to be possible in relation to the importance of direct care. In particular, this is associated with the ability to function at an advanced level of clinical practice. This was characterised primarily by an ability to articulate patient problems to other members of the interdisciplinary team, engage in algorithmic thinking and provide rationale for decisions made. Leadership activity was also evident in the work of nurse practitioners who demonstrated similar properties to their clinical nurse specialist/consultant colleagues in empowering other nurses,

establishing a vision of what was to be achieved for patients and risk taking (Section 5:4:1; Logic Diagram B - Appendix 15). Leadership in the area of specialist knowledge was also evident in the development and dissemination of knowledge, which involved research and presentation. In conclusion, therefore, advanced nursing practice in adult critical care should demonstrate both direct care and management of patients, and leadership characteristics. If these are not both apparent then it might be claimed, in terms of direct care and management, that the nurse is functioning at an advanced level in clinical practice, but is not yet engaged in advanced nursing practice. Advanced nursing practice would be recognised through an ability to engage in advanced clinical nursing practice, leadership and the ability to develop and disseminate knowledge.

The development and preparation of advanced practice nurses appeared not to rest solely on the attainment of postgraduate education. Instead, it seemed to be the product of symbiosis of experiential learning and formal education. The results of this research did not demonstrate the superiority of any particular form of educational content in developing a perceived increase in autonomy. However, this cannot be stated definitively until further research has been undertaken. This formed the subject of earlier recommendations associated with research.

Power relationships were demonstrated through the identification of the intervening variables, conflict and resistance. Facilitative intervening conditions attempted to counterbalance these in the guise of established values and overcoming resistance. Although conflict was not a new addition to the literature associated with the sociology of nursing, it had not been addressed in previous literature associated with advanced nursing practice, nor had it been portrayed in any former theoretical frameworks. It also demonstrated a possible difference in the type of communication engaged in by advanced practice nurses and the interdisciplinary team, particularly with medical staff. This communication was marked by a decrease in deference and attempted to establish a more collaborative approach which focused on patient care, management and outcome rather than professional sensibilities.

Another major consequence of the research undertaken for this thesis arose from both intervening and strategic conditions. Specifically those associated with conflict, resistance, political awareness and the strategic activity associated with restoring. It related to the provision of a new form of critical care led by advanced practice

nurses. The characteristics of this innovation were the provision of continuity and consistency beyond the geographical confines of specialist units, overcoming bureaucratic systems to expedite patient care and recovery, the emergence of the importance of restoring in the recovery of critically ill adults alongside that of cure, the crossing of traditional professional boundaries in order to expedite patient care and management and decreasing the trauma of critical illness. This forms the basis of a qualitatively different critical care service to that which is currently offered in England. It also provided a rationale for crossing traditional professional boundaries which was based on providing timely and effective intervention, rather than relieving other professional groups of irksome tasks. The conflict which resulted from this activity was an outward manifestation of this changing perspective, which frequently took the guise of gender bias. This was often a result of the different orientation of the advanced practice nurse towards nurture and the attributes of cultural feminism, rather than the characteristics of objectification and cure usually associated with the male gender.

Some clarification of the current confusion, in England, concerning specialist, expert and advanced clinical nursing practice has also been proffered and was achieved through the identification of characteristics related to advanced clinical nursing practice. The delineation outlined in section 6.2.5 may seem simplistic but, it is suggested, some simplification of the developmental process is required if the profession of nursing in England is to gain some sense of its own worth. For the last decade, at least, professional development has been characterised by the changing priorities of governing bodies. It is hoped that the recommendations made related to this topic, in terms of both policy development and research, might be taken forward following the reorchestration of the UKCC.

In conclusion, the substantive theory, Legitimate Influence, the key to advanced nursing practice in adult critical care provides the basis for future evaluation and exploration of the concept. It is accepted that change will occur over time particularly in terms of the intervening, strategic and consequence conditions, and the relational propositions. This will be necessary as relationships alter amongst professional groups, future innovations occur in practice and outcome evaluation becomes more patient focused and balanced with the needs of service provision. What should not alter is the patient orientation of the substantive theory. There is currently, in England, a great opportunity to demonstrate the value of advanced nursing practice

to patient care, management and recovery, as a result of the appointment of nurse consultants. The substantive theory presented in this thesis also offers a unique opportunity for the delivery of critical care services to undergo radical change for the benefit of patients and their families. It is hoped we are able to rise to this challenge and demonstrate the value of nursing in general, and advanced nursing practice in particular, within the context of adult critical care in terms of our achievements in progressing patient care, management and recovery. The measure of our success, or otherwise, will lie in what has been achieved for patients and those close to them both during and following critical illness.

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APPENDICES

Appendix 1 - Consent

CONSENT FORM

CITY UNIVERSITY

RESEARCH PROJECT TITLE

Advanced Nursing Practice in Critical Care

ADVISOR

Dr. Carol Cox

Researcher - Carol Ball

The purpose of the research is to develop the theoretical basis of Advanced Nursing Practice in Critical Care. To achieve this, grounded theory methodology will be utilised. This interview forms the first part of the data collection process and will take the form of a semi - structured interview. The data will be analysed utilising open and axial coding.

All data will be identified numerically, not by name. Only the researcher will know to whom the number pertains. Transcription will be performed in part by a secretary and in part by the researcher. Coding will, in the first instance, be performed by the researcher and will later be coded independently to ensure the data is analysed objectively. You will be asked, at a later date, to verify the contents of the transcript and may be asked to give your opinion on the results of the transcription analysis. The data collected will form part of a dissertation to be completed for the award of a PhD in Nursing.

THIS IS TO CERTIFY THAT I,

.....

(print name)

hereby agree to participate as a volunteer in the above named research project. I give permission to be interviewed. I understand that the results of the research will be treated confidentially, and that my name will not be associated with the research.

I understand I am free to deny any answer to specific questions. I also understand that I am free to withdraw my consent and terminate my participation at any time without penalty.

I have been given the opportunity to ask whatever questions I wish and all such questions have been answered to my satisfaction.

.....

(Signature of Participant)

.....

(Signature of Researcher)

Appendix 2 - Interview Schedule 1

The Preliminary Research Instrument - utilised in October 1996

Interview Schedule

Researcher - Carol Ball

Advisor - Dr. Carol Cox

Advanced Nursing Practice in Adult Critical Care

1. Could you provide me with a brief outline of your career development thus far?
e.g. Posts held, education undertaken
2. What actions have been necessary to achieve your current position?
e.g. How has role been negotiated
3. Could you describe any hostile situations experienced in your career?
4. What actions are taken to overcome these?
5. What initiatives have been taken to achieve current identity?
6. What opportunities have been taken that are beneficial to the role/identity?
7. What have been the major successes in relation to advanced nursing practice?
8. What have been the major failures in relation to advanced nursing practice?
9. What is the purpose of engaging in advanced nursing practice?
10. What knowledge is valuable for the performance of the advanced nursing practice role?
11. How might the role be developed?
12. What would you see as the major attributes of a person successfully engaged in advanced nursing practice?
13. What could be identified as the actual and potential consequences of advanced nursing practice?

Appendix 3 - Interview Schedule 2

The Second Research Instrument - utilised February 1998 - January 1999

Interview Schedule

Researcher - Carol Ball

Advisor - Dr. Carol Cox

Advanced Nursing Practice in Adult Critical Care

1. How would you describe the impact you have on patient stay in hospital?
2. How would you describe the difference you make to patient outcome?
3. How would you know when your role as a advanced practice nurse is over?
4. How would you see yourself in relation to other nurses?
5. How do you feel the interdisciplinary team views you role?
6. How do you feel the institution views your role?

Appendix 4 - Interview Schedule 3

The Third Research Instrument - utilised - January 1999 - October 1999

Researcher - Carol Ball

Advisor - Dr. Carol Cox

Advanced Nursing Practice in Adult Critical Care

From your experience, give an example of an incident which really epitomised the advanced practice role for you. Would you then please indicate what the components of the situation are that you really valued?

Describe a challenging situation in your role, which may or may not be associated with example 1. Please indicate the issues involved and strategies used in an attempt to overcome the situation. Please identify any particular factors which you feel may have impeded your ability to overcome the situation and outline the outcome (positive and negative situations are welcome).

Appendix 5 - Publication List of Advanced Practice Nurses

M A Curley - Clinical Nurse Specialist

Curley MA (1999) Prone positioning of patients with acute respiratory failure: a systematic review. American Journal of Critical Care 8 (6): 397 - 405

Curley MA, Fackler JC (1998) Weaning from mechanical ventilation: patterns in young children recovering from acute hypoxemic respiratory failure. American Journal of Critical Care 7 (5): 335 - 345

Curley MA, Castillo L (1998) Nutrition and shock in pediatric patients. New Horizons 6 (2): 212 - 225

Curley MA (1998) Patient-nurse synergy: optimizing patients' outcomes. American Journal of Critical Care 7 (1): 64 - 72

Curley MA (1997) Mutuality - an expression of nursing presence. Journal of Paediatric Nursing 12 (4): 208 - 213

Curley MA (1996) The synergy model of certified practice: creating safe passage for patients. Critical Care Nurse 16 (4): 94 - 99

Norma McNair - Acute Care Nurse Practitioner

McNair ND (1999) Traumatic brain injury. Nursing Clinics of North America 34 (3): 637 - 659

Caswell DR, Williams JP, Vallejo M, Zaroda T, McNair N, McNair ND, Keckeisen M, Yale C, Cryer HG (1996) Joint Committee - Journal of Quality Improvement 22 (10): 702 - 712

Thompson JM, McNair ND (1995) Health care reform and emergency outpatient use of rural hospitals in Alberta, Canada. Journal of Emergency Medicine 13 (3): 415 - 421

Kathleen Vollman - Clinical Nurse Specialist

Vollman KM, Sprung P, Posa S, Ladin D, Kachhal SK (1998) Strategies for reducing material costs through implementation of clinical guidelines. Journal of Social Health Systems 5 (4): 69 - 73

Basham KA, Vollman KM, Miller AC (1997) To everything turn, turn, turn ... An overview of continuous lateral rotation therapy. Respiratory Care Clinics North America 3 (1): 109 - 134

Vollman K (1997) Prone Positioning for ARDS. Dimensions in Critical Care Nursing 16 (4): 184 - 193

Tymec AC, Pieper B, Vollman KM (1997) A comparison of two pressure relieving devices on the prevention of heel pressure ulcers. Advances in Wound Care 10 (1): 39 - 44

Vollman KM, Bander JJ (1996) Improved oxygenation utilizing a prone positioner in patients with acute respiratory distress syndrome. Intensive Care Medicine 22 (10): 1105 - 1111

Vollman KM, Stewart KH (1996) Can we afford not to have clinical nurse specialists? American Association of Critical Care Nurses Clinical Issues 7 (2): 315 - 323

Vollman KM (1994) Adult respiratory distress syndrome: mediators on the run. Critical Care Clinics of North America 6 (2): 341 - 358

Ann Wojner - Acute Care Nurse Practitioner

Wojner AW (1998) Leadership and the bedside RN. Nurse Spectator (Wash DC) 9 (10): 9

Wojner AW, MacCutcheon MA (1998) Longitudinal outcomes measurement and management. Standardized practices across the continuum of care. Critical Care Nursing Clinics of North America 10 (1): 33 - 40

Wojner AW, Rauch P, Mokracek M (1997) Collaborative ventures in outcome management: roles and responsibilities in a service line model. Critical Care Nursing Quarterly 19 (4): 25 - 41

Wojner AW, Kite-Powell D (1997) Outcomes manager: a role for the advanced practice nurse. Critical Care Nursing Quarterly 19 (4): 16 - 24

Wojner AW (1997) Outcomes management: from theory to practice. Critical Care Nursing Quarterly 19 (4): 1 - 15

Wojner AW (1996) Optimizing ischaemic stroke outcomes: an interdisciplinary approach to poststroke rehabilitation in acute care. Critical Care Nursing Quarterly 19 (2): 47 - 61

Grady GF, Wojner AW (1996) Collaborative Practice teams: the infrastructure of outcomes management. American Association of Critical Care Nurses Clinical Issues 7 (1): 153 - 158

Wojner AW (1996) Outcomes management: an interdisciplinary search for best practice. American Association of Critical Care Nurses Clinical issues 7 (1): 133 - 145

Michael Ackerman - Acute Care Nurse Practitioner

Papathanassoglu ED, Moynihan JA, Ackerman MH(2000) Does programmed cell death (apoptosis) play a role in the development of multiple organ dysfunction in critically ill patients: a review and a theoretical framework. Critical Care Medicine 28 (2): 537 - 549

Ackerman MH (1999) What would Vesalius think? American Journal of Critical Care 8(2): 70 - 71

Ackerman MH, Mick DJ (1998) Instillation of normal saline before suctioning in patients with pulmonary infections: a prospective randomized controlled trial. American Journal of Critical Care 7(4): 261 - 266

Mick DJ, Ackerman MH (1997) Neutralizing ageism in critical care via outcomes research American Association of Critical Care Nurses Clinical Issues 8 (4): 597 - 608

Ackerman MH (1997) The acute care nurse practitioner: evolution of the clinical nurse specialist. Heart and Lung 26 (2): 85 - 86

Ackerman MH, Norsen L, Martin B, Wiedrich J, Kitzman HJ (1996) Development of a Model of Advanced Practice. American Journal of Critical Care 5 (1): 68 - 73

Ackerman MH, Ecklund MM, Abu-Jumah M (1996) A review of normal saline instillation: implications for practice. Dimensions in Critical Care Nursing 15 (1): 31 - 38

King KB, Ackerman MH (1995) An educational model for the acute care nurse practitioner Critical Care Clinics of North America 7 (1): 1 - 7

Appendix 6 - Derivation of the First Interview Schedule, utilising the theoretical perspective of Symbolic Interactionism and the preliminary literature review

Theme Derivation from Theoretical Perspective	Theoretical Sensitivity from Preliminary Literature Review	Questions for Interview Schedule
1. Notion of career	No fixed social identity	To reflect two levels:
	Plethora of terms used to label the role	Concrete - professional career development. Rationale for this - first question - aim to relax participant
	Reengineering	
	Redesigning	<i>Abstract - Reflect on the way social identity has been negotiated:</i>
		What actions are adopted to achieve purposes?
		What conscious human actions are adopted to overcome hostile situations / unwelcome labelling?
		What initiatives have been taken to achieve current identity ?
		What initiatives still need to be undertaken to achieve a future identity ?
		What opportunities have you taken that are beneficial to the role / identity ?
		What dangers have you experienced / perceived and avoided ?
		What do you see as past failures in the role / identity ?
		What have been your major successes? What is your purpose in engaging in advanced nursing practice ?

		What plans do you have for the role ?
2. Circumstances	Educational Preparation	What knowledge would you deem to be as valuable in the performance of advanced nursing practice?
3. Individual construction of the role	<ul style="list-style-type: none"> • Assessment and evaluation should have a research emphasis (one of the subroles - researcher) • Higher levels of decision making • Autonomy • Expert Skill (subrole) • Integrate Education (subrole), Research, Management, Leadership and Consultancy (subrole) 	What would you perceive to be the major attributes of a person engaged in advanced nursing practice?
4. Consequences of Human Action	<p>a. Benefits to patient outcome:</p> <ul style="list-style-type: none"> • ? Decreased patient stay on ICU • ? Decreased morbidity • ?Decreased mortality • ? Decreased Infection Rate • <p>b. IC Nursing may develop a practice orientated knowledge base. i.e. knowledge may be derived from practice through research.</p> <p>c Knowledge derived will have a patient focus.</p>	What would you identify as the potential and actual consequences of advanced nursing practice?

Appendix 7 - Key Participants

Participant 30 CNS UK

Participant 31 CNS UK

Participant 32 CNS UK

Participant 33 CNS UK

Participant 10 CNS and NP USA

Participant 34 NP USA

Participant 35 NP USA

Participant 13 CNC Australia

Participant 16 CNC Australia

Participant 28 CNC New Zealand

Participant 40 NP Canada

Appendix 8 - Glossary of Terms

Action/Interaction	Strategies designed to manage, handle, carry out or respond to a phenomenon under a specific set of perceived conditions.
Axial Coding	A set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilising a coding paradigm involving conditions, context, action/interactional strategies and consequences.
Category	A classification of concepts. This classification is discovered when concepts are compared one against the other and appear to pertain to a similar phenomenon. Thus the concepts are grouped together under a higher order, more abstract concept called a category.
Causal Conditions	Events, incidents, happenings that lead to the occurrence or development of a phenomenon.
Code Notes	Memos containing the actual products of the three types of coding, such as, conceptual labels, paradigm features and indications of process.
Coding	The process of analysing data.
Concepts	Conceptual labels placed on discrete happenings, events and other instances of phenomena
Conditional Matrix	An analytic aid, a diagram, useful for considering the wide range of conditions and consequences related to the phenomenon under study. The matrix enables the analyst to both distinguish and link levels of conditions and consequences.
Conditional Path	The tracking of an event, incident, or happening from action/interaction through the various conditional and consequential levels, and vice versa, in order to directly link them to a phenomenon.
Consequences	Outcomes or results of action and interaction.
Context	The specific set of properties that pertain to the a phenomenon; that is, the locations of events or incidents particular set of conditions within which the action/interactional strategies are taken.
Core Category	The central phenomenon around which all the other categories are integrated.

Diagrams	Visual representations of relationships between concepts.
Dimensions	Location of properties along a continuum.
Family	Refers to those who are close to the patient, even though there may be no blood tie or legal recognition of the group.
Interaction	People doing things together or with respect to one another - the accompanying action, talk and thought processes.
Interdisciplinary Team	A team of people, educated in various aspects of health care, where professional boundaries are blurred. The key characteristics of interdisciplinary team working are trust, tolerance and a willingness to share responsibility. It differs from multidisciplinary team working where each member of the team has a distinct professional perspective, individual responsibility and unique skills which are combined to meet patient need (Nolan 1995).
Intervening Conditions	The structural conditions bearing on action/interactional strategies that pertain to a phenomenon. They facilitate or constrain the strategies taken within a specific context.
Logic Diagrams	Visual representations of analytic thinking that show the evolution of the logical relationships between categories and their sub categories, in term of paradigm features.
Memos	Written records of analysis related to the formulation of theory.
Open Coding	The process of breaking down, examining, comparing, conceptualising and categorising data
Methodological Notes	Memos containing directions to the researcher regarding sampling, questions, possible comparisons, leads to follow up on etc
Properties	Attributes or characteristics pertaining to a category
Phenomenon	The central idea, event, happening, incident about which a set of actions or interactions are directed at managing, handling or to which a set of actions is related

Process	The linking of action/interactional sequences.
Selective Coding	The process of selecting the core category, systematically relating it to other categories, validating those relationships and filling in categories that need further refinement and development.
Story	A descriptive narrative about the central phenomenon of the study.
Storyline	The conceptualisation of the story. This is the core category.
Tertiary Sector	Hospital provision of health care, specifically acute and critical care areas.
Theoretical Notes	Theoretically sensitising and summarising memos. These contain the products of inductive and deductive thinking about relevant and potentially relevant categories, their properties, dimensions, relationships, variations, processes and conditional matrix.
Transactional System	A system of analysis that examines action/interaction in relationship to their conditions and consequences.

Appendix 9 - Key Participants comments on preliminary findings: a summary

All participants agreed with the key issues identified within the publication, *Revealing Higher Levels of Nursing Practice*, (Ball 1999). The incorporation of comments into the thesis is indicated through reference to the appendix number and specific comment number (e.g. Appendix 9:1). An example of the comments made included:

General Comments

- I can only concur with everything you've put forward ... I felt like I was reading a textual mirror of my working life ...
- In terms of confirmation of your findings I think you have it on the money. I think the expert clinical role is very complex and certainly this has come through in the study.
- I admit to not having a big handle on the literature in this area but certainly my readings have never captured the real world essence that your study brings and certainly captures the essence of how to be an expert and certainly facilitate change
- I think you have given it a very 90's perspective with an examination of the complex social and political relationships
- In your methods I find your writing great it captures the role wonderfully
- This is the best I have read on this role I look forward to seeing the full study
- I thought this was a very interesting paper Carol and felt that you have identified some very key issues
- This is an excellent paper which is easy to read and raises issues clearly for discussion. In this reader's experience, it certainly is developing new knowledge and clarifying issues that have not been so specifically identified or described in the nursing literature.

Specific Comments

1. I am very interested in your comments relating to the correlation of post basic education and functioning in the role. I always shudder when I see individuals appointed to the CNC role without tertiary qualifications.
2. ... where I differ is that neither my BSc (Hons) or MSc has been in Nursing. My first degree was in applied social sciences and my masters in health care policy and organisation.
3. People can have qualifications and years of experience but for some reason do not apply skills learnt in one arena to the other.
4. The other thing I think you have captured beautifully is the political nature of the relationships that the expert clinician must engage in to achieve change
5. Your discussion on restorative care captures a fundamental concept of the role
6. If you look at the development of nursing we need to constantly evaluate, change and evolve. The skills to do this are not solely embedded in the performing of proficient clinical skills. The skills are much wider and diverse and thus difficult to articulate ... This is probably as many of the skills are in the affective domain.
7. the CNC role...is I believe the articulation of the nexus between theory and practice. Maybe in the ideal world these would be conjoint clinical/academic appointments.
8. In your Logic Diagram would you see the patient trajectory with a curve feeding back into community health professionals and the advanced nurse practitioner ... peeling off at this point.
9. When you talk of patients' outcomes there is no mention of gathering of evidence or data as part of the role. Did that not come through in the interviews?
10. Trustworthiness, tenacity and survival are all good discussions, what one becomes, is an expert at being proactive in all domains.
11. Continuity - following the patient through and providing stability in the nurse-patient "essentially personal relationship".
12. It is suggested that the word 'role' is used with caution, particularly as what is being investigated is performance in practice (p68 Col.1). This reader suggests that "autonomy" is about performance as opposed to role. The autonomy is in the domain of nursing - what Watson describes as "being there".
13. Care needs to be used when using the term "quality" as quality can be bad as well as good. It is suggested that the text addresses the differences more clearly.
14. Autonomy is patient focused, not status orientated (p71). Inherent in this is a crucial set of values which differ from those which relate to professional/social status.

15. In your first two categories relating to patient experience and outcome, I would support what you say, but would also suggest it is about enabling others to do this as well.
16. Thus on page 71 you suggest that 'advanced practice is about patient care, management and outcome', is advanced practice also about the process and leadership and how this is achieved.

Appendix 10 - Audit Trail

The Audit Trail demonstrates the evidence upon which the development of the grounded, substantive theory, Legitimate Influence: the key to advanced nursing practice in adult critical care is based. There are ten key elements:

- Legitimate Influence - the key to advanced nursing practice
- Enhancing Patient Stay
- Improving Patient Outcome
- Leadership in Clinical Practice
- Leader Within Specialist Area of Knowledge
- Restoring
- Promoting Knowledge Development and Dissemination
- Consequences
- Constraining Intervening Conditions
- Facilitating Intervening Conditions

Each element is reviewed in the reverse order i.e. from the end of the analysis to the beginning of the analysis in order to demonstrate the continual presence of data which contributed to theoretical development. Refer to the Contents pages to ascertain notation of sections, figures, logic diagrams and appendices.

- Legitimate Influence - the key to advanced nursing practice (Core Category)

Defining and Establishing the Core Category:	Section 5:5:1
Relational Proposition, indication of the context necessary	Section 5:5:2:(i)
Interdependent Phases of Legitimate Influence	Logic Diagram 4
Importance of Credibility	Section 5:5:1
Advanced Clinical Nursing Practice	Section 5:7
Change from Clinical Expertise to Advanced Clinical Nursing Practice	Section 5 5.1
Category Definition from Open Coding	Section 5.3 (iii)
Legitimate Influence from Trustworthiness	Section 5 5 1 Appendix 14 Section 14 2
Importance of Credibility (Open Coding)	Appendix 14 Section 14 1 2 (v)

Importance of Clinical Expertise	Appendix 14 Section 14:1:2 (v)
Original Derivation of Trustworthiness	Appendix 14 Figure D
<ul style="list-style-type: none"> • <u>Enhancing Patient Stay (EPS)</u> 	
Relational Proposition, indication of the context necessary	Section 5:5:2: (iii)
Purpose of Legitimate Influence to EPS	Figure 5:1
Strategic Activity associated with EPS	Figure 5:4
Data Supporting Category	Section 5:4:3
Nurse Orientated - Professional Properties (and associated data)	Appendix 15 Logic Diagram A
Patient Orientated Properties (and associated data)	Appendix 15 Logic Diagram A
Remaining Conditions of EPS	Appendix 15 Logic Diagram A
Category Definition from Open Coding	Section 5:3(i)
Derivation of Intervening Conditions affecting EPS	Appendix 14 Section 14:2 (v)
Original Derivation of EPS (and associated data)	Appendix 14 Figure A
<ul style="list-style-type: none"> • <u>Improving Patient Outcome (IPO)</u> 	
Relational Proposition, indication of the context necessary	Section 5.5:2:(iii)
Purpose of Legitimate Influence to IPO	Figure 5:1
Strategic Activity associated with IPO	Figure 5:4
Data Supporting Category	Section 5:4:3
Nurse Orientated - Professional Properties (also in associated data)	Appendix 15 Logic Diagram A
Patient Orientated Properties (also in associated data)	Appendix 15 Logic Diagram A
Remaining Conditions of IPO	Appendix 15 Logic Diagram A

Category Definition from Open Coding	Section 5:3 (ii)
Derivation of Intervening Conditions affecting IPO	Appendix 14 Section 14:2 (v)
Original Derivation of IPO (and associated data)	Appendix 14 Figure B
<ul style="list-style-type: none"> • <u>Leadership in Clinical Practice (LCP)</u> 	
Identification of the causal condition - LCP	Figure 5:2
Data Supporting Causal Condition	Section 5:4:1
Properties of the Causal Condition (in associated data)	Appendix 15 Logic Diagram B
Derivation of LCP from open coding (iii)	Appendix 14 Section 14:2 (vi), & (ii) Section 14:1:2:(vi)
Presence of Personal Properties associated with LCP in open coding (and associated data)	Appendix 14 Figure E
<ul style="list-style-type: none"> • <u>Leader Within Specialist Area of Knowledge (LWSAK)</u> 	
Identification of the causal condition - LWSAK	Figure 5:2
Data Supporting Causal Condition	Section 5:4:1
Properties of the Causal Condition (and associated data)	Appendix 15 Logic Diagram C Appendix 5
Derivation of LWSAK from open coding	Section 5:3 (vii)
Presence of Properties associated with LWSAK in open coding (and associated data)	Appendix 14 Figure C

- Restoring

The 3 Main Components of Restoring	Logic Diagram 3
Indirect / Direct Care Emphasis (and associated discussion)	Logic Diagram 2
Strategic Activity associated with Restoring	Figure 5:4
Data Supporting Strategic Condition	Section 5:4:3
Importance of Restoring (open coding)	Appendix 14 Section 14:1:2:(iv)
Purpose of Patient Education to Enable Independence	Appendix 14 Section 14:1:2:(ii)
Importance of Continuity (Appendix)	Appendix 14 Section 14:1:2:(i)
Importance of Continuity (Main Text)	Logic Diagram 1

- Promoting Knowledge Development and Dissemination (PKDD)

Relational Proposition, indication of the context necessary	Section 5:5:2:(ii)
Conditions associated with PKDD	Appendix 15 Logic Diagram C
Category Definition from Open Coding	Section 5:3:(iv)
Becomes part of the foundation of Legitimate Influence	Appendix 14 Section 14:2:(viii)
Original Derivation of PKDD (and associated data)	Appendix 14 Figure C

- Consequences

Criteria for evaluating the consequences of Legitimate Influence	Table 5
Consequences of Legitimate Influence	Figure 5:1
Data Supporting Consequence Conditions	Section 5:4:4
Objective and Subjective Indicators of Legitimate Influence	Appendix 14 Section 14:1:2:(iii)

- Constraining Intervening Conditions (CIC)

Impact of CIC on Legitimate Influence

Logic Diagram 4
Section 5:5:2

Impact of CIC on EPS and IPO
(and associated data)

Figure 5:3

Data Supporting Intervening Conditions

Section 5:5:2
Section 5:4:2

Political Awareness comprises Marketing

Appendix 14
Section 14:2:(ix)

Identification of concepts from open coding to
intervening conditions

Appendix 14
Section 14:1:2:(vii)

Original Derivation in open coding

Appendix 15
Figure E
Figure F

- Facilitating Intervening Conditions

Established Values - the core of advanced nursing practice in
critical care and lines of compromise

Logic Diagram 5

Data Supporting Intervening Conditions

Section 5:5:2
Section 5:4:2

Impact of CIC on EPS and IPO
(and associated data)

Figure 5:3

Establishing Negotiation as part of Overcoming Resistance

Appendix 14
Section 14:2:(iv)

Original Derivation in open coding

Appendix 14
Figure E
Figure F

Collapsing of Categories

Appendix 14
Section 14:1:2:(I-
vii)
Section 14:2 (i -
ix)

Appendix 11 - Conference Presentations, by abstract submission

December 1995	The Nature of Advanced Nursing Practice Advances in Nursing Practice The Barbican, London. UK National
June 1997	Advanced Nursing Practice in Critical Care The Royal Victoria Hospital: Centenary Conference Belfast, UK International (Proceedings Manual. Published Abstract)
February 1998	What is 'Advanced' about Advanced Nursing Practice 6th International Nurse Practitioner Conference Melbourne, Australia International (Proceedings Manual. Published Abstract)
June 1999	What is 'Advanced' about Advanced Nursing Practice International Council of Nurses Conference London, UK International (Proceedings Manual. Published Abstract)
April 2000	Legitimate Influence - the Key to Advanced Nursing Practice RCN Research Conference Sheffield, UK National (Proceedings Manual. Published Abstract)

By invitation:

September 2000	Debating Advanced Nursing Practice British Association of Critical Care Nurses - Southern Region London, UK Regional
December 2000	Advanced Nursing Practice in Critical Care State of the Art Meeting - Intensive Care Society London, UK National

Appendix 12 - Monitoring Patient Progression

Based on the work of Egloff Parr (1996) and Hravnak (1998). The following Tables provide examples of issues to be considered by the APN in the care and management of critically ill patients and their families. It is not exhaustive and will need to be tailored to specific patient populations. The documentation is meant to be shared by the interdisciplinary team and personnel identified to take action and to follow up on patient progress. A front sheet will need to be developed which records all consistent data e.g. previous patient history, contact details for family/friends, critical events and evaluation of effectiveness should also be summarised.

In Intensive Care:

Date Number of Days in Intensive Care

Personnel involved in decision making

Primary Reason for admission to intensive care

Current Problems

Issues that may be identified	Specific Concerns	Action to be taken	Follow Up date/time
Ventilation/perfusion adequate for tissue oxygenation	Blood Gases Oxygenation Indices Auscultation CXR Consecutive Lactates Positioning Secretions		
Haemodynamic status stable and appropriate	Rhythm/Rate Mean Arterial Pressure Cardiac Output/Index Preload Afterload DNR status		
Weaning Potential	Tidal Volume Respiratory Rate Work of Breathing Conscious Weaning Method Timing of weaning trials		

	Risk of Aspiration Suction/Secretion Management		
Fluid and Electrolyte Balance	Urine Output Urea Creatinine Pulmonary or peripheral oedema Albumin Renal Replacement Therapy		
Infection/SIRS status	Pyrexia Vasodilated Venous and arterial line status Culture status - blood, sputum, urine, wound Microbiology requests/results White cell count		
Nutrition	Caloric Intake Feed appropriate Method of Delivery appropriate Feeding protocol followed Risk of Aspiration		
Gastrointestinal System	Bowels open last? Adequate perfusion of mesentery/stoma		
Neurological Status	Glasgow Coma Scale Sensory Deprivation/ Overload/ Sleep		

	Cerebral Perfusion Pressure		
Clotting	Evidence of bleeding Platelet count INR		
Endocrine	Blood sugar Hormonal Imbalance		
Skin	Wound status Pressure Area Risk Score Mattress appropriate		
Pain	Patient Report of Pain Management appropriate Side Effects		
Sedation	Sedation score appropriate for patient management Side Effects		
DVT prophylaxis	TED stockings Heparin		
Psychosocial	Appropriate family/friend understands patient's condition / prognosis / problems Social Worker required Other family concerns Fully informed re:- waiting room, unit routine, cafeteria,		

	Side Effects		
Haemodynamics	Rate / Rhythm MAP Warm, well perfused DNR Status		
Fluid and Electrolyte Balance	Patient drinking Intake adequate Signs of Dehydration Urine Output Adequate Catheter removed Mechanical difficulties following removal		
Infection	Pyrexia Need to culture blood, urine, sputum, wound Presence of peripheral oedema		
Nutrition	Patient Eating - intake adequate Supplements required / offered Method of feeding appropriate / adequate		
Gastrointestinal System	Bowels open last Constipation / Diarrhoea addressed		
Skin	Wounds clean, dressed appropriately PAC Protocol Effective		

Mobility	DVT prophylaxis appropriate Activity schedule meets needs of patient and progression apparent Able to self care Maintaining hygiene needs		
Pain	Patient Report of Pain Managed appropriately Consider co'morbid states for pain e.g. arthritis, headache		
Sleep	Sufficient Difficulties encountered		
Patient Education	Scheduled / Occurs Patient demonstrates understanding of health problems, recovery and learning to cope Family included		
Continuity	Appropriate services provided e.g. physio, occupational health, specialist nurses - stoma etc. Patient / Family understands recovery process Is patient progressing? if not, why not?		
Psychosocial	Family / Friends informed of		

	patient progress / deterioration Last time spoken to Prepared for discharge / transfer Home situation appropriate		
Ward Staff	Learning needs Skill Mix Issues Case Review Discussion		
Ward Environment	Safety needs met Meets patient requirements Appropriate equipment needed		

Key - CPAP - Continuous Positive Airways Pressure; MAP - Mean Arterial Pressure;
 PAC - Pressure Area Care, INR - International Normalised Ratio

Goals for next 24 hours, days, week:

Appendix 13 - Participant Contribution to the Formation of the Paradigm Model

Category	Enhancing Patient Stay	Improving Patient Outcome	Legitimate Influence	Promoting Knowledge Development and Dissemination
Participants	1, 2, 3, 6, 8, 9, 10,	1, 3, 4, 8, 9	3, 7, 8, 9, 27, 30, 32, 33	1, 3, 5, 8, 9, 10

Causal Conditions	Whole Trajectory of Patient Illness Seen as a Priority	Focus is on Outcome	Leader - Specialist Area of Knowledge	Leader in Clinical Practice
Participants	16, 35, 36, 37	1, 8, 12, 22, 31, 39	See Appendix 5	1, 27, 30, 31, 32
Properties by Participant	1, 6, 8, 9, 10, 12, 13, 15, 23, 24, 25, 27, 33, 40,	16, 17, 19, 20, 21, 22,		1, 8, 9, 10, 12, 15, 16, 17, 19, 20, 21, 26, 27, 28, 30, 31, 32

Intervening Conditions	Conflict	Resistance	Overcoming Resistance	Challenges
Participants	1, 2, 3, 4, 8, 9, 10, 13, 14, 20, 23, 32, 33, 35, 39	6, 9, 12, 13, 23	1, 3, 6, 8, 9, 10, 14, 15, 18, 21, 22, 24, 25, 26, 30, 31, 32, 33, 34, 37	3, 8, 7, 9, 15, 23, 29, 31, 32, 34, 35, 36, 40 ,

Gender Bias	Over Zealous	Time Availability	Political Awareness	Established Values
1, 13, 14, 16, 17 30, 33	9, 27	8, 30, 31	3, 8, 10, 12, 13, 14, 15, 31, 32,	8, 9, 12, 13, 19, 26, 30, 32

Strategic Conditions	Improving Patient Stay	Patient Education	Continuity	Restoring
Participants	1, 7, 8, 9, 12, 13, 15, 16, 17, 19, 20, 23, 24, 25, 27, 29, 30, 33	1, 6, 8, 13, 16, 24, 25	3, 6, 8, 9, 12, 13, 14, 15, 18, 19, 21, 23, 24, 25, 26, 28, 29, 31, 33, 40	3, 8, 25, 32

Quality Enhancing	Publication	Lecturing	Leader of Professional Organisation	Develops Knowledge Through Research
1, 8, 9, 12, 20, 21, 22, 26, 27, 28	1, 8, 13, 22, 30, 31	8, 9, 12, 27	1, 3, 8, 24	12, 15, 24, 27, 28, 30, 31, 32, 33

Consequences	Patient Satisfaction	Independence Enabled	Trajectory of Continuity	Prepared for Transitions
Participants	1, 6, 8, 13, 22	18, 25, 29, 31, 32, 40	3, 12, 21, 16, 18, 23, 24, 25,	1, 24, 28

Increased Efficiency	Clear Understanding	Collaborative Practice	High Visibility
3, 20, 12, 13, 14, 15, 26, 29, 39	6, 8, 24	3, 9, 12, 27, 35, 37	8, 13, 15, 16, 22, 27

Appendix 14 - Preliminary Analysis

14:1 Open Coding

Open coding was undertaken during and following the first period of data collection (1996 - 1997 - Figure 4:1) using the first interview schedule (Appendix 2), fieldnotes and discussion with the project's co-analyst. As previously stated, it involved identifying concepts within the transcripts and generating categories from these (Strauss and Corbin, 1990). The properties, that is to say the attributes or characteristics of the category, were then identified. The dimensional range of the property was then considered and these represented a range of responses. The results of open coding analysis will be represented as follows:

Concept		Property <-- ^{Dimensional Range} --->
Concept	Category	Property <----->
Concept		Property <----->

The first two categories generated related to patient experience and outcome. During the data collection period (January 1996 - December 1999) many of the advanced nursing practice roles, particularly those of CNS and CNC, were under threat in the countries where data was collected (Section 2:1 - summary). Participants, therefore, represent those who demonstrated continued success in the role, were in employment and available for interview.

The remaining categories referred to the professional expectations of the advanced practice role and the personal characteristics and interpersonal skills required. Professional expectations related to the trust placed by other nurses in the advanced practice role because participants demonstrated both 'credibility' and expertise. A further expectation appeared to rest in an ability to promote the role through presentation and publication. Personal characteristics and interpersonal skills revealed the requirements necessary to survive the exigencies of advanced nursing practice in adult critical care.

Figure A - Enhancing Patient Stay

Enhancing Patient Stay was the first of the categories to demonstrate the core activities of advanced nursing practice in adult critical care.

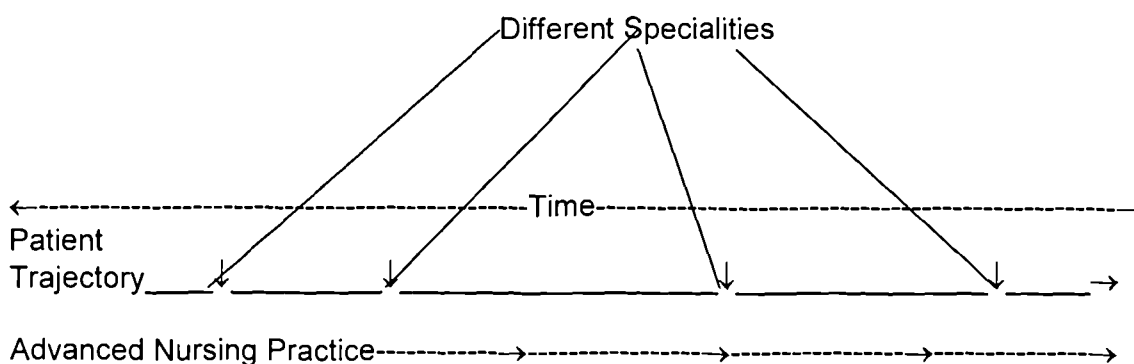
<u>Concept</u>	<u>Category</u>	<u>Properties</u>
Improving	Enhancing Patient Stay	Satisfaction Low \longleftrightarrow High
Continuity		Enabling Dependence \longleftrightarrow Independence
Patient Education		Trajectory Intermittent \longleftrightarrow Continuous
Quality		Autonomy Evident \longleftrightarrow Not evident

The concept of 'improving' focused clearly on the patient, either in a direct or an indirect manner. 'Improving', in terms of a direct effect, reflected a close relationship with the patient, focused on reducing the trauma of hospitalisation, ... *So part of my vision so to speak is that we would impact on ... patients in a very meaningful way for them so that their experience in the hospital would be less traumatic (1) ...* Indirectly it took the form of leadership ensuring staff had the knowledge and skills to deliver effective patient care, and acting as a role model ... *believing in the role ... to enhance patient care by having not only a clinical resource, teacher, educator, but of being a model for other staff (3) ...* and ensuring the environment was conducive to the delivery of good patient care ... *What I think is important ... in my role is to set up an environment so that the staff have the knowledge, skills ... to deliver good patient care (10).*

However, contextual fieldnotes indicated that, whether 'improving' occurred directly or indirectly an emphasis was placed on reducing the trauma of hospitalisation by promoting 'continuity' of care and 'patient education'. It may be seen, in the following text, that health promotion and risk reduction form an element of the latter, together with the preparation of patients for the event (e.g. surgery) ... *So that they would come out knowing better about some health promotion activities - risk reduction ... and I don't think that the patients necessarily get that unless they are in an area where nursing really has the opportunity to work (1) ...* and the resumption of independence ... *we have impacted patient education, in general how prepared patients are and how soon patients are ready and able to resume their self care (8) ...* usually through establishing specific classes in which this occurred ... *My role right now is patients. I teach them classes (6).*

Participant observation and contextual fieldnotes indicated that 'continuity' was achieved through the interpretation of discussion within the interdisciplinary team. From this, individual priorities were established which addressed the patients' whole trajectory or experience ... *I keep thinking if the role is not here ... how does it get followed up on, what is the continuity? How can issues on a particular patient be covered day to day. A physician can cover the clinical ..., but as far as the other aspects which are very key to how patients comply in the future. What sort of things do they need to support them (3) ...* This marked the crossing of traditional clinical boundaries and customary practice, where nurses usually remain steadfastly in a specific geographic location, especially those of intensive or high dependency care units. This is represented by the following logic diagram.

Logic Diagram 1 - Continuity of Care Provision in Advanced Nursing Practice



The diagram represents the continuity of advanced nursing practice throughout the patient's experience (or trajectory) of illness or need (horizontal lines and arrows). As opposed to the range of different specialities (and therefore nurses) the patient may experience in one period of hospitalisation. The vertical arrows represent the different groups of nurses the critically ill patient normally meets during one period of hospitalisation. Examples of this may be ward, operating theatre, intensive care unit, high dependency unit and another ward. Contextual fieldnotes and participant observation demonstrated this movement through various specialities was a threat to the continuity of care each patient should expect. Continuity also expanded beyond the hospital and into the community ... *the pre-op day was not addressed, then it would effect the discharge because they did not really have a plan as to who was going to take care for them when they got home. So I started taking the initiative (6) ...*

Quality indicators were inherent within the previous concepts of 'improving', 'continuity' and 'patient education'. That is to say the trauma of hospitalisation should be reduced, education should occur and be understood by patients and continuity of care should be evident. 'Quality' advanced nursing practice may also be demonstrated as a subjective measure of patient satisfaction ... *that there would be less of an incidence of those problems ... patients and families are satisfied with their care, satisfied with the information that they received, satisfied with the ability to communicate with the team and those are the things that we do measure and do very well (8) ...* Or as an objective measure through ... *preventing complications; skin breakdown, pneumonia's, infections ... problems with aspiration, line infection (9) ... all of these things obviously cause pain and dollars to patients and families and lives getting back to where they started (8) ...* which also emphasised the importance of restoring patients to their previous health status following critical illness.

Analytical memos indicated an interrelationship between the concept 'continuity' from which the category Enhancing Patient Stay has been derived and 'restoring' which is a concept supporting the following category Improved Patient Stay. Scrutiny (Quality) of the patients' experience of critical illness across traditional clinical boundaries (Continuity) increases the possibility that patients may be restored (Restoring) to their previous health status. This is enhanced through the provision of Patient Education.

Three of the properties related directly to the patient - Satisfaction, Enabling Independence and Trajectory (Figure A). One related to a quality which needs to be apparent in the advanced practice nurse - a willingness to be engaged in autonomous practice. The patient orientated properties were measurable and demonstrate dimensional tendencies which can be observed. They eventually became consequences within the paradigm model and critical indicators were developed to evaluate their presence (Table 5).

Evaluating the effectiveness of advanced nursing practice, in relation to Enhanced Patient Stay (Figure A), may be achieved through review of the dimensional range associated with the properties outlined above. Theoretical memos suggested that if patient satisfaction was low, the trauma of hospitalisation was increased. This may be a direct result of nursing staff not focusing on patient/family needs, continuity of

care not being established, patient education not being provided effectively, information not being provided in an understandable manner and/or the occurrence of complications. Another example may be that patients exhibit dependency, rather than independence. This may be the result of conflicting information being given, or understood as such by the patient, poor education or no education being provided. Thus decreasing the quality of the service and the potential impact of advanced nursing practice on the critically ill adult.

A more positive view may be taken in relation to trajectory. If patient management was planned as a whole, independent of the speciality, then trauma is reduced because continuity had been assured. For example, active measures had been taken to reduce complication rates, problems associated with patient transfer from one hospital area to another were avoided and education was scheduled to occur. These are some of the factors which could be used to measure or observe the impact of advanced nursing practice in action.

Contextual fieldnotes indicated that in order to achieve the positive effects of advanced nursing practice in adult critical care, autonomy was a fundamental property of the category, Enhancing Patient Stay. It has been argued (Weins, 1990) that autonomy is impossible for nurses to achieve, however this is usually because the area in which autonomy is being sought is within the domain of another health care profession. Autonomy can be demonstrated if the action taken is within the realm of nursing as indicated in the verbatim text above. Further examples of this could be the advanced practice nurse recognising a need for other services to be activated, an increased need for information/education or a patient's propensity to develop a certain complication. The advanced practice nurse needs to be able to recognise where action should be taken in the first instance. This was usually developed through practice experience and underpinned by relevant knowledge. This established a relationship with the properties of a following category, Trustworthiness (Figure D), where clinical experience and relevant knowledge underpin the concept of 'credibility'.

A correlation can be postulated between, Enhancing Patient Stay and the following category, Improving Patient Outcome. If patient stay is enhanced, it is probable patient outcome will be more positive.

Figure B - Improving Patient Outcome

<u>Concept</u>	<u>Category</u>	<u>Properties</u>
Restoring	Improving	Preparedness Low ↔ High
Accountability	Patient	Confusion Little ↔ Great
Focus	Outcome	

The concept of 'restoring' appeared almost unrelated to medical intervention or nursing care ... *I have certainly learned in this role that despite excellent medical intervention and intense nursing focus/intervention if the patient is not psychologically prepared or ready to make transitions that we expect them to make ... nothing happens, health just does not get restored, it just doesn't (8).*

Contextual fieldnotes revealed an important variable associated with 'restoring' was the ability of the patient to make successful transitions through a complex health care system. Success appeared to be dependent upon the level of preparedness of the patient and became a property of the category, Improving Patient Stay (Figure B). Outcome, in terms of the 'restoring' also appeared to require an integrated approach to the entire span of critical illness and beyond, which aimed to reduce the amount of confusion patients or families may experience ... *I think it is important to be clear to the consumer and to be clear to the patients who are being taken care of (6) ...*

The 'focus' of the advanced practice nurse is on patient outcome ... *when you talk about advanced practice you're ... supposed to produce an outcome and it's supposed to be a quality outcome ... It will always have an impact on the value of the role ... because the focus of the job is outcome (8)* and another participant ... *Whatever it takes to reach the best outcome for the patient is what I support (3).* Outcome was a definitive focus which encompassed the transfer of the patient to the ward, rehabilitation unit or home ... *what really matters is outcome and how well they do, so that is probably the critical part (1).* It was apparent that advanced practice nurses felt accountable for evaluating patient outcome ... *I will be held more accountable for more straight forward evaluation of patient outcome ... which I think is very good and I personally value that, I am very outcome oriented (1).*

In relation to the properties of improving patient outcome, preparedness and confusion, evaluative criteria may be posited utilising the dimensional profile. Theoretical memos suggested that if the patient's level of preparedness for transition was low and confusion was great, the patient would not be restored to a previous level of function or independence. Improved patient outcome could be demonstrated if patients were prepared to take the steps necessary to achieve maximal personal health and were able to demonstrate a clear understanding of how current health status may be maintained or improved. The subsequent categories, Promoting the Role and Trustworthiness, delineate professional expectations in relation to advanced nursing practice.

Figure C - Promoting the Role

<u>Concept</u>	<u>Category</u>	<u>Properties</u>	
Publication	Promoting	Presence Prof. Activity	locally \longleftrightarrow internationally member \longleftrightarrow leader
Lecturing	the	Interdisciplinary Enthusiasm	single \longleftrightarrow multiple cold \longleftrightarrow passionate
Prof. Organisation Marketing	Role	Visibility Confidence	covert \longleftrightarrow overt low \longleftrightarrow high

Most of the activity associated with this category aimed at heightening the visibility of the speciality or the role itself. Publication was evident both as texts and chapters and there was a real desire to promote knowledge upon which practice could be based ... *I am writing a textbook which is actually the first acute care nurse practitioners textbook ... I am looking forward to learning a lot from writing the book (1)*. Lecturing occurred at a local and national level both for professional organisations and for educational institutions ... *I've always lectured nationally and locally (8) ...*

Contextual fieldnotes indicated involvement with a professional organisation also appeared to be important. Membership, alone, was not normally seen as adequate. Activity which characterised advanced nursing practice was that of leadership, whether at a local or national level ... *I just put together a professional organisation for acute care nurse practitioners, so that consists exclusively of nurse practitioners who function in hospital or adult critical care settings (1)* and another participant ... *I have*

been very active in the American Association of Adult Critical-Care Nurses (AACN). I ran the chapter, ... and I later became the president of it and ... I was active at the regional level for AACN and we created the first regional conference ... and I have been active nationally in the certification committee for AACN and later became the Chair of that (8) ...

Marketing was seen to be relevant, certainly within an institution it was necessary to be highly visible to be successful. Customers were seen to be patients, families, nursing staff, medical practitioners and hospital management ... *So really what the ... advanced practice person is doing is marketing. Marketing herself to her customers regarding what it is she (he) has to offer (8) ...* Visibility also related to promoting clarity and understanding of the situation a patient was experiencing, and this could pertain to decreasing confusion, identified as a property of the previous category, Improving Patient Outcome (Figure B).

Demonstration of clinical expertise was vital if the advanced practice role was to be seen as credible, and therefore marketable, to nursing staff ... *they need not to flaunt it but they need to carry themselves in such a way that it's apparent ... You don't need to say follow me I'm smarter than you, all you need to do is demonstrate that ... (It's not) because you've got a masters or you've got a PhD and you're doing this, I mean that's just so what ... It does not mean anything, because we're show me kind of people (8) ...* This links to the concepts identified in the next category 'Trustworthiness' (Figure D). Confidence and an interest in knowledge development within the speciality appeared to be key elements in successful marketing to medical practitioners ... *I tried to make myself visible with the physicians, I would go to their education meetings and they would see I am interested (10).*

The properties associated with, Promoting the Role, were many and varied. Theoretical memos indicated that, in relation to promoting the role within the profession, it was necessary to establish a presence at local and national levels. It was also important to market the role outside the nursing profession, especially in terms of the institution and the interdisciplinary team, if the role was to be deemed successful. In order to achieve this visibility, confidence must be evident ... *You have to be able to demonstrate confidence ...* Finally, the role needs to be undertaken with an enthusiasm verging on the passionate ... *the staff are happy, the doctors are happy and everybody is pleased to come to work. If this kind of work is not done with passion then it is miserable to do, its got to be work you want to do (10).* This passion for the role

appeared to be derived from the established values of the individual engaged in advanced nursing practice and provided a link between this property and the concept of 'established values', identified in a following category 'Tenacity' (Figure E).

An example of evaluative criteria derived from the properties and dimensional profile, of the category Promoting the Role, were that if visibility was low, professional activity was not evident and confidence was not demonstrated it was unlikely the role of the advanced practice nurse would be seen as relevant to the profession itself or to those in the interdisciplinary team. The danger of this was that without the presence of advanced nursing practice; nursing may not achieve it's full potential or be recognised for its contribution to Enhancing Patient Stay and Improving Patient Outcome. Contextual fieldnotes indicated that the role would not be seen as relevant if nursing failed to be clear about how an 'advanced' level of practice would be of benefit to patients.

Figure D- Trustworthiness

<u>Concept</u>	<u>Category</u>	<u>Properties</u>	
Credibility Clinical Expertise	Trustworthiness	Valuing Expertise Low \longleftrightarrow High	
		Years of experience	Few \longleftrightarrow Many
		Knowledge	Out of date \leftrightarrow Up to date
		Relevance	Little \longleftrightarrow Much

Advanced practice nurses rated 'credibility' very highly ... *'credibility' to me is everything (3) ... and usually this was gained through the possession of relevant knowledge and experience in the speciality ... it proves the point for the need for knowledge and clinical expertise to be able to work with others ... and clinical expertise ... You cannot have that role without having clinical expertise ... and later ... It is a real struggle to see people who do not have the clinical background, the clinical expertise which is required of the role, and how ... they are not accepted by the staff. It is really clear who the experts are. You can't talk yourself into anything if you don't have the clinical background (3) ...* In particular this referred to individuals who had been given an advanced practice title and received postgraduate 'generalist' education (Chapter 2), but lacked clinical experience within the speciality. Clinical expertise appeared to be intrinsically valued by the nurses advanced practice nurses work with. 'Credibility'

was also associated with being 'up to date' knowing the latest equipment and literature ... *they need to be on the cutting edge, they need to know what the latest equipment is, they need to know the latest literature (8).*

It was therefore apparent that, in terms of the properties related to the category of 'Trustworthiness', it was necessary to have many years of experience in the speciality. However, that in itself was not sufficient to invoke an advanced level of nursing practice ... *its really the marrying of the clinical expertise and the academic expertise that gives us our advanced practice nurses (13).* Knowledge should, therefore, be up to date and relevant to practice. Non participant observation and contextual fieldnotes revealed clinical expertise also needed to be valued by the employing institution, without this advanced nursing practice was unlikely to flourish. This 'valuing' might be evident in an institution showing a demonstrable willingness to allow advanced practice nurses to practice and to update knowledge and skills, rather than becoming immersed in managerial activity. The final categories demonstrate the inherent personal characteristics fundamental to advanced nursing practice and the interpersonal issues which arose as a result of the interdisciplinary influence on the role.

Figure E - Tenacity

<u>Concept</u>	<u>Category</u>	<u>Properties</u>	
Conflict	Tenacity	Adaptable	Fixed \longleftrightarrow Inflexible
Resistance		Perspicacity	Present \longleftrightarrow Absent
Challenge		Stamina	Low \longleftrightarrow High
Established Values		Assertive	Weak \longleftrightarrow Strong

The concepts associated with the category of 'Tenacity' reflected issues of power and the culture of advanced nursing practice in adult critical care. Power relationships and cultural mores were evident within the concepts of 'conflict, resistance, challenge and established values'. The category, therefore, portrays the presence of interpretive interactionism within this grounded theory study (Chapter 3).

In the early stages of data collection 'conflict' was usually associated with medical colleagues and referred to in terms of strategic action. To deal with 'conflict' several strategies which were identified. Amongst these was choosing whether the issue confronting the advanced practice nurse was a 'hill to die on' ... *Generally if we have a conversation we can usually reach a meaningful and not such a conflicting situation, but there are times truly when it comes to the point where I cannot get my point across and I usually do have to say, we as a group disagree with this and I feel strongly about this ... If it is a patient issue, its a hill to die on, then you have to do that. To me you have to choose those hills and if it is an interpersonal type thing then it is not going to hurt ... patient welfare then it is not so critical (8).* This verbatim text also demonstrated the properties identified in this category (Figure E). Those of perspicacity, being able to discern relevant areas for action and assertion, clearly identifying areas of disagreement and acting upon these. 'Stamina' also featured as an important personal attribute ... *Sometimes it irritates me because I think, 'for how long is this going to be like this?' that you have to justify the kind of practice, you know its a lot of work, its a lot of mental energy (9) ...* which indicated that change occurs over time. Therefore energy and finishing power were required if advanced nursing practice was to demonstrate an impact on patients' experience of critical illness and outcome.

Resistance, was portrayed predominantly by nursing staff and was associated with the development of a patient focus to care ... *it is really hard, I had to say I don't care what the issues are ... but then at some point unless I got at what was underneath, they were never going to be accepting (9)...* which again demonstrated the property, perspicacity. Contextual fieldnotes provided examples of changing the focus of care. These were associated with increasing family participation in care, the presence of the family on ward rounds and retaining a three shift system to maintain consistent nurse presence at the bedside.

Conflict and resistance were also evident in those with whom the advanced practice nurse had close working relationships ... *it is interesting to find that many of the ... conflicts arise over who is in control at any given time. Namely, if the physician feels he or she may not have control of the situation and they have high control needs ... there is always a conflict there (3).* Areas of conflict were proactively dealt with ... *needless to say we had to discuss the problem, so I told them, I said you know on rounds, its not the right place to have those sort of discussions, because first of all that is exactly what he likes - an audience and to show he is going to rule the roost (10).* That is to say, the advanced

practice nurse had developed an understanding of when conflict and resistance were likely to occur and instituted strategies to deal with these.

Awareness of challenges being a part of everyday life was also demonstrated. It was necessary to try several approaches to a certain situation, and be clear about what was important, to overcome the situation successfully ... *I would say you just have to expect a lot of challenges and figure out how to get through the doors that you need to get in and if you can't get through a door there's always windows and if the windows don't work just blow up the building, go through it (8).* The formation of established values appeared to provide a foundation upon which decisions relating to conflict, resistance or challenge were made ... *I can say the most hostile situations I have been in have been when I have to assert that this is very important to me in that sense (9).*

In summary, the properties of Tenacity demonstrated the personal qualities of the advanced practice nurse. To exhibit Tenacity early participants in this study demonstrated adaptability and perspicacity in identifying issues of real importance. To meet these challenges, stamina and assertiveness were required. The role of the advanced practice nurse in adult critical care appeared to be consistently subject to scrutiny and under threat. For this reason contextual fieldnotes and verbatim text led to the formulation of the final category - Survival in the Role.

Figure F- Survival in the Role

<u>Concept</u>	<u>Category</u>	<u>Properties</u>	
Politically Aware	Survival in the Role	Unified	disparate←→cohesive
Flexibility		Working the system	effective←→ineffective
Astuteness		Values and	inconsistent←→consistent
Negotiation		Behaviour	

The two main areas identified for consideration in Survival were the institution and individuals. Individuals included peers, medical practitioners, patients and hospital management .

In relation to the institution a major emphasis was placed upon political awareness ... *I mean you need to understand the bureaucratic and political issues ... I think you have to be politically savvy on some level ... just an ability to politically work the system and to be effective. I think that is key (8).* Demonstrating astuteness appeared vital to the success of the role. At times this resulted in a loss of popularity and the advanced practice nurse had to be able to deal with this personally ... *each story has developed three sides to the story, yours, mine and the truth and it is not that people lie, they just read the reality differently ... so you learn very quickly that really you don't make any judgement or do any accusing whatever, just follow through the situation, see where it goes (10)...*

Evaluation criteria identified in the properties and dimensional range of this category (Figure F) indicated it was unlikely advanced nursing practice would be successful if there was a lack of insight into bureaucratic systems. Success would be demonstrated through an ability to work the system effectively utilising astuteness. Flexibility was also demonstrated in the above data and a certain latitude was required in seeing through a particular situation or initiative. This was promoted through focus on the issue itself and not on the personalities impacting on the situation. It established the importance of a clear vision in delineating the purpose of 'advanced' nursing practice in adult critical care.

Negotiation involved the four groups of individuals identified earlier. Contextual fieldnotes indicated different skills were used and perspectives taken in the process of negotiation. Of importance, in relation to the peer group, was the necessity for shared values and a unified perspective of what 'nursing' in a particular speciality was aiming to achieve. This illustrated the importance of shared cultural values in the delivery of adult critical care services. Again links can be made with the category 'Trustworthiness', as the most important factors used by other nurses to judge advanced practice nurses were clinical expertise and 'credibility'. As the role develops consistency needed to be demonstrated, particularly in the values and behaviour of the advanced practice nurse thus providing a sound basis upon which future decisions related to practice could be made ... *It's because I'm consistent, people are not nervous about "what does she really want?" They know what it is ... that's probably the most important thing for the staff... consistency (9).*

Relationships with medical practitioners tended to be more persuasive, although challenging at times, than combative. A recurring element was the necessity of keeping medical practitioners informed of practice development and research. It was possible that these findings reflected a more collaborative approach to clinical practice than one which consistently challenges the current balance of power. The way to success appeared to be in making advanced nursing practice indispensable. A lack of success seemed unavoidable if the advanced nursing practice role was seen as a threat ... *to demonstrate to them (medical practitioners) why exactly it is they need me, they have to have me and right now they believe they have had a religious experience and they need me (8)...*

Patients did not seem to be well informed about advanced nursing practice and accepted individuals functioning as nurse practitioners or clinical nurse specialists ... *The negotiation with the patient is the easy part. It has to be one to one (1) ... and another participant ... families are probably easier ... open to somebody who can give them what they need to take care of themselves ... as long as there is baseline confidence ... that front is not really a major front to deal with (8) ...* Success appeared to lie in providing the patient/ family with the information required to deal with the impact illness was having upon them and this related back to the category Enhancing Patient Stay.

Two major elements surfaced from contextual fieldnotes and interview data relating to hospital management. Firstly, for the role to be introduced and maintained it had to be seen as important. Therefore in 'selling' the role it was necessary to address issues important to the institution or department ... *that sometimes they might not know what a nurse practitioner is ... but after they realise the services I provide are much better ... they come around very quickly. They hold me accountable to make sure they get the information they need (1) ...* Such factors as improving recruitment and retention, decreasing length of stay (LOS) and increasing satisfaction/quality care were likely to be of prime importance in negotiation with this group. This related to a second element within the data which indicated organisations may not necessarily know why advanced practice nurses had been hired ... *institutions ... not knowing why it is they hire you. There are always some tense, challenging situations (8) ...* indicating that this lack of understanding was also perceived as a challenge demonstrating an association with the category 'Tenacity'.

14:1:2 Summary Points - Open Coding

This preliminary review of findings revealed several key elements which characterised 'advanced' nursing practice in adult critical care. These will be further developed during the process of axial coding and were:

- I. the difference in the 'trajectory of care' delivery in enhancing patient stay and improving outcome and the centrality of the patient. Early participants in this study focused on patient population and long term follow up of patients rather than the short term emphasis of a nurse working in an adult critical care area. In developing the paradigm model 'continuity' became a strategic condition upon which Enhancing Patient Stay and Improving Patient Outcome were dependent (Axial Coding and Figure 5:4).
- II. the importance of 'patient education' in enabling independence. 'Patient education' later became a strategic condition and 'enabling independence' became a consequence of the developing theory (Axial Coding and Figure 5:1).
- III. identification of 'quality' indicators to measure the subjective and objective impact of advanced nursing practice. These in turn became consequences of the successful implementation of the role (Axial Coding, Figure 5:1 and Table 5).
- IV. a major focus is 'restoring' the patient to the previous level of health or one which has improved, if this is possible. In turn this became a strategic condition, which combined 'improving patient care, continuity of care and patient education' (Logic Diagram 7) which underpinned the categories Enhancing Patient Stay and Improving Patient Outcome (Axial Coding and Figure 5:4).
- V. the importance of "credibility" and 'clinical expertise'. These two concepts finally became the properties of the core category (Figure 5:1 and Selective Coding).
- VI. the essential personal characteristics required to survive in the role. These later became properties of the causal condition - Leadership in Clinical Practice (Axial Coding and Logic Diagram 4).

VII. the identification of factors which detracted from the successful performance of the role, such as conflict and resistance. These became intervening conditions during the process of axial coding (Figure 5:3).

The preliminary findings in the form of a publication (Ball, 1999) were circulated to key participants (Appendix 7) and the co-analyst for critical review. Appendix 9 provides a summary of the comments made. This process indicates the involvement of participants in the co-creation of the paradigm model. This is a key feature of the constructivist paradigm and adds to the 'credibility' of the study. The comments, made by the key participants, were integrated into the process of axial coding.

14:2 Alterations made to open coding analysis during the axial coding process

As indicated in the *methods chapter and the introduction to this chapter*, axial coding culminates in the development of a paradigm model (Strauss and Corbin, 1990). This was achieved through the consideration of causal, contextual, strategic, intervening and consequences conditions (Section 4:9). It is usual during the process of axial coding for the categories, together with their properties and dimensions developed during open coding, to collapse. That is to say earlier categories become integrated in to more robust categories and conditions. This became evident, in this study, as the paradigm model developed. As Strauss and Corbin state:

"Open coding fractures data and allows identification of some categories, their properties and dimensional locations. Axial coding puts those data back together in new ways ... still concerned with the development of a category but beyond its properties and dimensions."

Strauss and Corbin (1990:97)

Axial Coding was undertaken during formal interviews incorporating the second and third interview schedules (Appendices 3 and 4), participant/non participant observation and informal interviews, member checking (Appendices 7 and 9) and discussion with the study's co-analyst. For the initial framework used to derive conditions during axial coding refer to Logic Diagram 2. Rationale underpinning the alterations made to the open coding analysis during the development of the

paradigm model are provided below and are based on methodological and analytical fieldnotes written during the process of continuous comparative analysis. The main categories and conditions which form the paradigm model are indicated through the use of capital letters. The concepts associated with these are identified through the use of inverted commas.

- I. Trustworthiness was altered to Legitimate Power, as the data appeared to demonstrate that authority was required in Enhancing Patient Stay and Improving Patient Outcome. In discussion following participant observation, Legitimate Power became Legitimate Influence. Emphasis was placed on the importance of 'Influence' which was deemed *... essential as there is no formal power base - no line management only professional 'credibility'. I have to rely on 'credibility' to lead in practice (30)...* Hence, 'credibility' was an essential attribute of Legitimate Influence and Leadership in Clinical Practice (Figure 5:2). Therefore 'power' was not the correct descriptor. It was identified, during participant observation and informal interview, that inflicting authority or power would not lead to a permanent impact upon the patient's experience of hospitalisation or lead to improved outcome. 'Influence' was seen to be more suitable because of the absence of a formal power base. Legitimate Influence indicates that only the 'credibility' of the individual, working at an advanced level, will succeed in permanently influencing enhanced patient stay and improved patient outcome. This may require a change to the culture of nursing within a particular speciality and accords with the view expressed by a key participant (Appendix 9: 17) which inferred that advanced nursing practice was also related to enabling other nurses to achieve positive patient outcomes. In summary, the category of Legitimate Influence has been derived from Legitimate Power, which was represented in open coding as the category Trustworthiness (Figure A). The conditional structure developed for the category - Legitimate Influence - is outlined in Logic Diagram 4.

- II. Personal reflection upon the concepts identified for the categories, Tenacity and Survival in the Role and the process of axial coding revealed these were causal and intervening conditions which could impact upon Enhancing Patient Stay and Improving Patient Outcome. The concepts - 'conflict, resistance, challenges, political awareness and established values' therefore became intervening conditions, as they may constrain or facilitate Legitimate Influence (Logic

Diagrams 3 and 4). 'Flexibility' and 'astuteness' became properties of the causal condition - Leadership in Clinical Practice, as these were amongst the attributes required to lead clinical practice (Logic Diagram 4).

- III. 'Adaptability' had been previously identified as a property of the collapsed category Tenacity but was subsumed into the property 'flexibility' to avoid repetition (Logic Diagram 4). The remaining properties; perspicacity, stamina and assertion, outlined for the collapsed category Tenacity have now also become properties of the causal condition - Leadership in Clinical Practice (Logic Diagram 4).
- IV. 'Negotiation' (a former concept of Survival in the Role) became a concept associated with the intervening condition - Overcoming Resistance. Overcoming Resistance comprises activities aimed directly at reducing resistance, and these were 'developing relationships, negotiation, role modelling and valuing others contributions' (Logic Diagram 4). The rationale for this was that the concepts were of importance in facilitating and maintaining an advanced level of nursing practice and needed to be recognised as such.
- V. In reviewing the transcripts and fieldnotes (Participants 1 - 40) no intervening conditions for Improving Patient Outcome (IPO) could be found. Consideration of this issue led to the realisation that intervening conditions for Enhancing Patient Stay (EPS) were the same for IPO. Enhancing Patient Stay and Improving Patient Outcome were inextricably linked (last paragraph open coding Enhancing Patient Stay - Figure 5:1). Not only this, some of the concepts supporting the derivation of the patient orientated categories, in open coding, could be seen as strategic conditions for both EPS and IPO. That is to say the concepts were used as action/interaction strategies through which the consequences of advanced nursing practice in adult critical care were achieved. Therefore, Improving Patient Stay, Patient Education, Restoring, Continuity and Quality became strategic conditions (Logic Diagram 3) within the developing paradigm model. The concept 'focus' from the category 'Improving Patient Stay' (Figure B) became a causal condition (Logic Diagram 3), as a Focus on Outcome was fundamental to the process of Enhancing Patient Stay and Improving Patient Outcome; and achieving the consequences of Legitimate Influence.

VI. Further analysis revealed that the open coding properties, for EPS and IPO, were all patient orientated, apart from 'autonomy', and that the properties for the causal conditions, Whole Trajectory of Patient Stay Seen as a Priority and Focus is on Outcome, were 'nurse' orientated. Therefore, 'autonomy' was made a property of the causal condition for EPS/IPO (Logic Diagram 3). Likewise 'accountability', a concept for IPO (in open coding), has also been moved to become a property of the causal condition, Focus is on Outcome, as it reflected orientation to nursing rather than a 'patient' orientated property. In summary, properties of the causal conditions - Whole Trajectory of Patient Stay Seen as a Priority and Focus is on Outcome - were nurse orientated and the properties of the categories, Enhancing Patient Stay and Improving Patient Outcome, were patient orientated (Logic Diagram 3). The properties of the causal condition for EPS/IPO delineate some of the professional attributes of a nurse functioning at an advanced level (Logic Diagram 3). The properties of the categories Enhancing Patient Stay and Improving Patient Outcome represent observable characteristics demonstrated by patients whose care and management has been influenced by advanced practice nurses.

VII. Promoting the Role has been altered to Promoting Knowledge Development and Dissemination (Logic Diagram 5). In reviewing the publications of nurses engaged in advanced practice the majority of the material dealt with issues related to their area of specialist practice, not to the role specifically (Appendix 5). Only two key articles written by advanced practice nurses, from the USA, indicate delineation of the advanced practice role itself. These were Ackerman et al (1996) who delineated an advanced practice model based on acute care nurse practitioner activity and the Synergy Model (Moloney-Harmon, 1999; Curley, 1998) which sought to demonstrate the impact of clinical nurse specialists on the critical ill. Both models reflect a separatist bias, but in fact further scrutiny revealed a number of similarities (Section 2:4, Table 2). It was also interesting to note, in support of the decision to combine various advanced practice role titles, that a CNS (Participant 40) effectively utilised a model developed to depict NP activity (Ackerman et al 1996) to guide her practice.

VIII. Nurses working at an advanced level promote knowledge of the speciality through Lecturing, Publication and Leading Professional Organisations (Figure 5:1). A probabilistic relationship exists between the promotion, development and

dissemination of knowledge and the category Legitimate Influence. That is to say that the development and dissemination of knowledge adds to the 'credibility' of the nurse practising at an advanced level. This was supported during discussion related to participant observation data collection (Participant 30) and through interview (Participant 31), where the participants stated medical colleagues in particular were more likely to attend to their views now that they had published successfully. This is now demonstrated in the basic structure of the paradigm model (Figure 5:1) where Promoting Knowledge Development and Dissemination provides a basis for 'credibility' and 'clinical expertise' underpinning, but not exceeding the importance of 'credibility' and clinical expertise in the exercise of Legitimate Influence.

- IX. Marketing has been removed from Promoting Knowledge Development and Dissemination as it was not directly involved with these activities. The interview data which portrayed the concept in open coding appeared more relevant to the intervening condition - Political Awareness and has now been subsumed within this condition.

The categories derived as a result of open coding collapsed, following the processes outlined above. The final categories denoting advanced nursing practice were:

- I. Enhancing Patient Stay (EPS)
- II. Improving Patient Outcome (IPO)
- III. Legitimate Influence
- IV. Promoting Knowledge Development and Dissemination

The relationship of the categories to the conditions considered during axial coding were represented in Figure 5:1

Appendix 15 - Intermediate development of the paradigm model using logic diagrams

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Logic Diagram A Conditional Structure for the categories Enhancing Patient Stay (EPS) and Improving Patient Outcome (IPO)

Causal Conditions

Whole Trajectory of Patient Stay
Seen as a Priority

Focus is on Outcome



Patient Oriented Properties

EPS Satisfaction low ↔ high
↑
↓ Enabling
IPO dependence ↔ independence
Trajectory
intermittent ↔ continuous
Preparedness
low ↔ high
Confusion
Great ↔ Little

Nurse Oriented - Professional Properties

able to prioritise
identify patients' needs over time
broad perspective
criteria for success determined
autonomy
accountability



Strategic Conditions

Improving Patient Care

- Decreasing Trauma
- Crossing Traditional Boundaries
- Influence Over Patient Management
- Effective Communication
- Networking Across the Whole Interdisciplinary Team

Patient Education

- Learning to Cope with Health Problem
- Day to Day Management
- Educational Strategies

Restoring

- Individual Function
- Ease Transition
- Maintaining Support

Continuity of Care

- 'Whole Package'
- Following Through

Quality Enhancing

- Feedback from Patients and Peers
- Raising the Profile of the Institution



Intervening Conditions

Conflict

Political Awareness

- Manipulate Bureaucratic Systems
- Stakeholder Involvement
- Marketing the Role



Consequences

Increased Patient Satisfaction

Independence Enabled

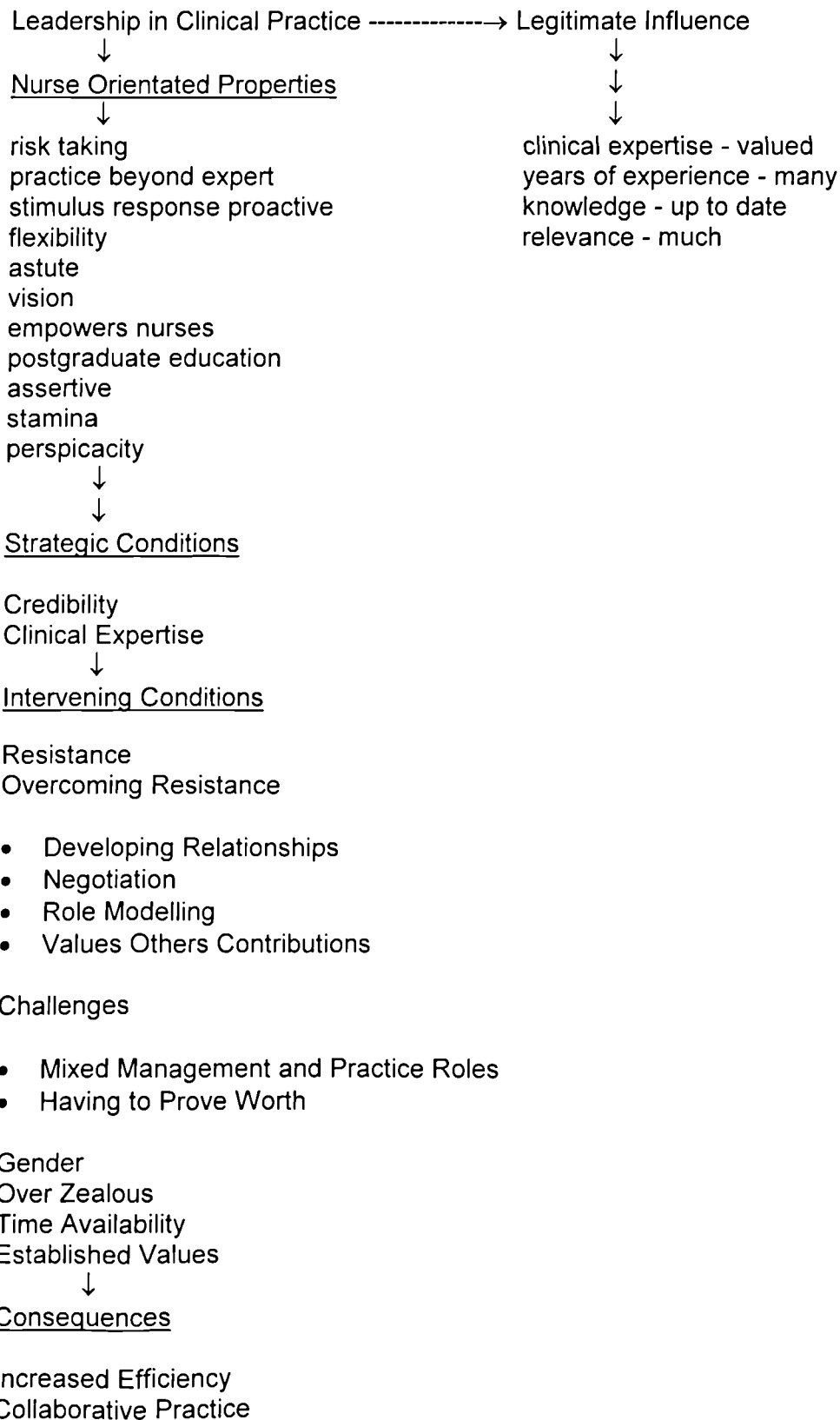
Trajectory of Continuity Evident

Patient Prepared to Make Transitions

Patient Demonstrates a Clear Understanding of Health Problems and Associated Responsibilities

Logic Diagram B Conditional Structure for the category Legitimate Influence

Causal Condition



Logic Diagram C Conditional Structure for the category Promoting Knowledge Development and Dissemination

Causal Condition

Leader Within Specialist Area of Knowledge



Nurse Orientated Properties



participates in professional
organisation
public speaking
cogent and lucid style of writing



Strategic Conditions

Publication
Lecturing
Active Involvement in a Professional Organisation
Develops Knowledge through Research



Intervening Conditions

Lacks Social Skills
Lacks Confidence to Write or Speak Publicly
Unable to Write at an Acceptable Level
Unable to Speak in a Logical and Engaging Manner
Inability to Gain the Attention of Others Working in the Speciality



Consequences

High Visibility

Promoting knowledge
development and
dissemination



presence - international
prof. activity - leader
interdisciplinary - multiple
enthusiasm - passionate
visibility - high