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REFLECTIVE THINKING IN NURSING PRACTICE

by

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*Men must at least have enough interest in
thinking for the sake of thinking to escape
the limitations of routine and custom.*

(Dewey, 1933)

ABSTRACT

While it is claimed in the nursing literature that reflective thinking is the approach par excellence for learning and advancing the art and practice of nursing, few empirical studies have been undertaken in this area to date. This thesis presents a study of reflective thinking. Sense-Making, a qualitative research method, was utilised to obtain and analyse data from interviews from ten Registered Nurses.

After exploring the seminal works of Dewey and Schön, the concept of reflective thinking was clarified in order to arrive at an operational definition. Ten non-routine nursing situations were analysed for the presence of reflective thinking. Time-Line interviews of the ten events resulted in a total of 59 Micro-Moments, each of which was explored in terms of how nurses engaged in reflective thinking, and furthermore, what the focus of this reflective thought was.

Reflective thinking was extensively manifest, especially in moments of doubt and perplexity. 'Pre-perceptions' played an important part in how the participants perceived their situation. Reflective thinking, an active cognitive process to create meaning and understanding, consisted of such activities as comparing and contrasting phenomena, recognising patterns, categorising perceptions, framing, and self-questioning. The latter activity was identified as a significant process within reflective thinking. By exploring and analysing the type of questions participants were asking themselves, the study uncovered three hierarchical levels of reflective thinking. Participants most often engaged in reflective thinking-for-action which centred on the here and now in order to act. Reflective thinking-for-evaluation focused on creating wholeness and contributed to the realisation of multiple perceptions and multiple responses. Reflective thinking-for-critical-inquiry is the highest level of the 'Reflective Thinking Pyramid' even though its occurrence could not be demonstrated in the study sample. The findings of this study resulted in the development of a 'Dynamic Process Model of Reflective Thinking', and are discussed in terms of the implications for nursing practice and nursing education. Finally, the Sense-Making Method is recommended as a framework to encourage and guide reflective thinking in nursing practice.

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CHAPTER ONE

INTRODUCTION AND OVERVIEW

INTRODUCTION AND AIMS OF THE RESEARCH

The concept of reflective thinking has received considerable attention, initially in the literature of teacher education and more recently in the nursing literature, where it is described as the method par excellence to learn from clinical practice. So influential is the concept of 'reflective thinking', that it has now been identified as a prerequisite competency for beginning nurse practitioners in Australia (ANRAC 1990). Professional nursing bodies, such as the English National Board (1989), and more recently the Nursing Council of New Zealand (1996), have advocated the development of what has become generally labelled as 'reflective practitioners'.

However, there is a lack of clarity as to what is the nature of reflective thinking, how it is utilised by practitioners, how it connects to nursing practice, and how it contributes to the development of nursing knowledge. While it is not unusual to encounter some temporary confusion when new concepts are introduced, nursing authors have not been able to clarify and discuss the concept of reflective thinking in a coherent manner. Terms such as 'reflection', 'reflectivity', 'reflective learning', 'reflective practice', 'critical reflection', and 'reflective journaling' contribute to the confusion, and are illustrative of the wide variety of views and interpretations concerning reflective thinking. The inconsistent and interchangeable use of these terms raises questions as to whether there is a shared and common understanding of the concept of reflective thinking. The discourse in the literature, more particularly among nurse-educators, has become increasingly muddled. This is of concern, as reflective thinking is seen by many as the panacea for the preparation and education of nurses, and for continuous professional growth once formal education ceases.

The aims of this research project are therefore to clarify the nature of reflective thinking, and to explore how qualified nurses think reflectively, as well as what the focus of their reflective thinking is while in clinical practice.

In order to set the scene this chapter provides a short discussion on the practice and art of nursing, followed by an exploration of the origins of reflective thinking in nursing. Attention is paid to the terminology commonly used in nursing literature, in order to develop an understanding of the underlying meanings. Critical thinking and journal writing, two concepts that are frequently mentioned in connection with reflective thinking are also explored. The chapter concludes with an outline of the remaining chapters of this thesis.

THE PRACTICE AND ART OF NURSING

Nursing is a practice profession and cannot be completely objectified or formalised because its complex social, practical, geographical, and historical bases make any description of discrete objective elements impossible (Benner, Tanner, & Chesla, 1996). One way of conceptualising nursing practice is by considering what the nurse practitioner does. By looking at the work of the nurse, one is able to gain at least some insight into the complexities of nursing practice.

Nursing practice is goal oriented by nature, as it is concerned with people and their health needs and well-being. Nurses intervene directly (care giving), or indirectly (care facilitator) to assist the client(s) to maintain, improve, or restore the person's situation/well-being. Nursing practice requires a special relationship between the practitioner, the care giver/facilitator, and the client or care recipient. Nursing takes place in context, and there are a whole range of factors such as social, cultural, personal, economical, political, historical and physical that contribute to, and influence and/or determine, the way nursing practice is accomplished.

To master the practical component, the nurse needs to develop clinical competencies such as caring skills, assessment skills and clinical decision making skills, as well as develop an ability to make value judgements. Beside this, nurses also need to be able to manage their workload and prioritise the required nursing interventions appropriately. Within any clinical situation, the nurse must take into account both what is considered to be timeless, universal knowledge, and what is considered to be contextual knowledge (i.e. knowledge related to a particular situation in time and

space). The practising nurse needs to make decisions that fit the situation but these decisions might not necessarily fit the theory, resulting in an incongruity. The acknowledgement of potential incongruity is important because it demonstrates that concepts such as 'theoretical', 'practical' and 'practice' are not the same. Adding to the complexities of nursing practice is the fact that the environments in which nurses practise are dynamic. Thus, nurses frequently deal with uncertainties inherent in the uniqueness of the situation such as the conflicting demands in regards to the client's needs versus available resources, the limited availability of time, and the discrepancies between the agency/institutional protocols, goals, and requirements, and the individual's needs. This uniqueness of the nursing context does not only depend on the presence or absence of these factors, but indeed, on how these dynamic components relate and interact with each other at that particular moment in time.

The arts component of nursing is found in the nurse's ability to make sense of the complex and dynamic matrix of events, to assess the situation, to deal with identified uncertainties and ambiguities, to resolve internal/external conflicts of interest, to prioritise care, to plan and implement appropriate interventions, and to evaluate nursing actions in a dynamic and constantly changing environment. Thus, the art of nursing is the balancing act of connecting the 'theoretical ideal' with the 'reality' of the clinical setting which requires a type of knowledge that can only be learnt in the clinical setting (Benner, 1984; Reed, 1995; Schön, 1983, 1987; Watson, 1979). Both, Benner and Schön asserted that clinical know-how can only be captured by the interpretive descriptions of actual practice and both authors emphasised the importance of reflective thinking in order to learn from, and develop expertise in, clinical practice. Many authors and nurse-educators have reiterated this pivotal role of reflective thinking in order to learn from clinical experience.

THE CONCEPT OF REFLECTIVE THINKING

In this section the nursing literature has been examined in an attempt to clarify the concept of reflective thinking and associated terms. However, two points need to be made. Firstly, within the nursing literature reviewed, varying terminology is used when describing or discussing the concept of reflective thinking. It is not uncommon for example, to find such terms as reflective thinking, reflective practice, and

reflection-in or on-action all mixed together in one article that examines 'critical reflection'. Concerns regarding this perceived lack of coherent and/or consistent use of the concept of reflective thinking have been expressed by a number of authors (Atkins & Murphy, 1993; James & Clarke, 1994; Jarvis, 1992; Newell, 1994; and Rich & Parker, 1995). Secondly, the discussions and conclusions reached by the authors of many of these articles are not necessarily the result of analysing and interpreting research data based on actual field studies that focus on reflective thinking in actual clinical practice. Rather, many are based on the examination and analysis of journal entries from students of nursing, reviews of the existing literature concerning reflective thinking, and/or the author's own personal experiences with reflective thinking (Davies, 1995; Hodges, 1996; Nicassio, 1992; Reid, 1993; Richardson & Maltby, 1995; Wong, Kember, Chung & Yan, 1995).

The Origins of Reflective Thinking in Nursing

The introduction of the concept of reflective thinking into nursing education and practice followed the trend set by the educators of teacher-trainees such as Zeichner (1980, 1981), Cruickshank and Applegate (1981), and Zeichner and Teitelbaum (1982). These authors emphasised the importance of 'hands-on' classroom experience for teacher-trainees in order to master teacher classroom skills and grow professionally. Their underlying assumption was that prospective teachers could never be prepared in a classroom setting for every possible situation they may encounter during their careers. Building on the ideas of Dewey (1933, see chapter 2), it was argued that these teacher-trainees, by means of reflective thinking, could be trained to reflect on their own 'hands-on' experiences in the classroom. Reflective thinking could thus be used by teacher-trainees to gain more knowledge and insight into things teaching, as well as enable them to direct their own personal and professional growth in the teaching profession. It is interesting to note the similarities between these writings in teacher education journals and the articles that appeared some years later in the nursing literature, especially where it relates to issues such as theory versus practice and the discrepancies between the two.

One can only speculate as to the precise reasons why discussions on reflective thinking started to appear in the nursing literature in the middle to late 1980s. Was it the overriding desire to find a theory for professional practice or was it a deliberate

move away from the technical rationality with its 'hard' science of empirical enquiry? It is also possible that the transfer of nursing education, in New Zealand and in a number of other countries, from health service institutions to tertiary institutions of education, might have necessitated discussions in the 1980s as to how students could be better assisted to learn such a practical profession as nursing while having less clinical experience. These discussions might have been spawned in part by the influential publications of two authors. The first author, Schön (1983, 1987), discussed how professionals were able to learn from their professional experience (see chapter 2). Schön's notion of the professional as a *reflective practitioner* has had a tremendous influence on nursing, and the impact of his writings, which is evident in such terminology as; 'reflecting', 'reflective practice', and 'reflection-in' and 'on-action', can be found in almost all the nursing publications concerning reflective thinking. The second author who drew attention to the importance of clinical nursing experience was Benner (1984), who maintained that nursing practice, due to its social and contextual nature, is marked by many non-routine situations that are at least partly indeterminate. She asserted that clinical know-how can only be captured by interpretive descriptions of actual practice and she emphasised the importance of reflective thinking in developing expertise in clinical practice. Benner did not provide a definition of reflective thinking although in her latest work (Benner et al. 1996, p. 325) she noted: "We have characterized this sort of thinking in action as *deliberative rationality* . . ." (italics are mine). Schön and Benner's publications resulted in reflective thinking becoming strongly associated with the acquisition of knowledge and expertise in clinical practice for students of nursing and qualified nurses alike.

Reflective Thinking in the Nursing Literature

Over the last decade, a flood of articles in a variety of nursing journals, most notably those focusing on nursing research and nursing education, has resulted in reflective thinking increasingly being viewed as the cornerstone of professional nursing in the 1990s (Newell, 1992). There is considerable agreement among the proponents of reflective thinking that it facilitates learning from clinical experience (Clarke, James & Kelly, 1996; Conway, 1994; Jarvis, 1987 & 1992; Johns, 1995; Fernandez, 1997; Palmer, Burns, & Bulman, 1994). Although the nursing literature referred extensively to Schön's work, Schön himself did not provide a definition of reflective thinking and this might well be the reason why the nursing literature reveals a multitude of nuances

as to what is reflective thinking. Few nursing authors provided a definition of the concept of reflective thinking, but those who did emphasised the learning aspects. For example Reid (1993, p. 305) maintained that reflective thinking is: "... a process of reviewing an experience of practice in order to describe, analyse, evaluate and so inform learning about practice" (sic). Reid saw reflective thinking as *a way of learning*, and a mode of survival and development, once formal education ceases. Reid thus emphasised such *deliberate cognitive processes* as 'describing', 'analysing', and 'evaluating'. Jarvis (1992, p. 180) defined reflective thinking as that: "... which seeks to problematise many situations of professional performance so that they can become potential learning situations and so the practitioner can continue to learn, grow and develop in and through their practice." Jarvis' writings emphasised that reflective thinking is a *deliberate or intentional cognitive process*, initiated by the nurse, and for the purpose of continued personal and professional development. While Reid and Jarvis emphasised learning, Saylor focused more on the effects on nursing practice. Saylor (1990, p. 11) described reflective thinking as: "... the artistry of combining a professional repertoire with current clinical problems to invent unique responses." Saylor's description emphasises the importance, and the uniqueness, of the nursing context. Furthermore, she maintained that the ability to engage in reflective thinking is also essential for self-evaluation and improving one's clinical competency.

The notion of learning and continuing professional development through reflective thinking is significant throughout the nursing literature. It is the quality of thinking that accompanies the experience that enables the individual to develop a new or changed perspective of the experience. Stockhausen (1994) maintained that without reflective thinking experiences would remain unexamined, resulting in the full potential for learning not being realised. This is especially so for the type of knowledge that is embedded in nursing practice, for such knowledge can not be gained in any other way. Reflective thinking has thus been claimed as a tool for learning and gaining knowledge, and has been promoted by nurse educators ever since.

Nursing theories do not, and can not, represent the 'reality' of the nursing world out there, and the relationship between theory and practice is much more complex than is

often assumed. While abstract nursing theories deal with rules and principles, these theories are not the equivalent of nursing practice and do not hold all the answers to the kaleidoscope of situations encountered in the nursing setting. Indeed, James and Clarke (1994) argued that the practical could not be understood solely in terms of rules, principles, techniques and 'know-how'. Thus, professional practice can be envisaged as a continuum between technical-rational interventions, based on objective theoretical nursing models and those nursing interventions based on the subjective perception and understanding of the contextual situation. The technical-rational methodologies that have governed nursing's educational processes in the past are inadequate and insufficient to meet the needs of professional nursing practice. While the former can be learnt out of context, e.g. in the classroom, the latter can only be mastered in the 'real' practice setting by means of reflective thinking.

Many authors argued that knowledge gained from this reflective thinking facilitated the integration of theory and practice (Emden, 1991; Leino-Kilpi, 1990; McCaugherty, 1991, 1992; Osterman, 1990; Reed & Procter, 1993; Snowball, Ross & Murphy, 1994). Whether this is indeed so is difficult to establish as these authors often used like-minded writings to support their claims in regards to the positive effects of reflective thinking. This is of concern because in doing this, the authors transferred their findings from qualified and experienced nurses to students of nursing, thereby blurring potential differences between the two groups. Are students able to utilise reflective thinking to the same extent as experienced practitioners? Is the amount of clinical experience allocated in the *comprehensive programmes*¹ sufficient for students to build up a repertoire of examples and understandings to assist reflective thinking. Benner (1984) suggested that this might not be the case. Her study indicated that novices (newly qualified nurses) lack experience and tend to concentrate on the rules they have learnt rather than rely on reflective thinking. While Benner studied qualified nurses, it is argued here that her findings are equally applicable to students of nursing. Thus, in order to maintain safety, students operate at their best as novice nurses and rely on the rules and theories learnt in the classroom,

¹ In New Zealand the term 'comprehensive programme' refers to a three-year full-time educational programme that prepares students of nursing to practice in a wide variety of clinical settings.

and on the 'routines' of the clinical setting, rather than being guided by their own reflective thought.

Although learning is considered the most important outcome of reflective thinking, surprisingly little data is available that demonstrates conclusively that learning has taken place as a result of it. Often discussions, and the resulting suggestions made, are not based on research findings but on personal opinions, while on other occasions research was done, but the author(s) failed to define the concepts involved (Bailey, 1995; Davies, 1995; Johns & Graham, 1994; Richardson & Maltby, 1995; Shields, 1995). Powell (1989) researched reflective thinking by means of interviewing and observing eight practising registered nurses. Powell (1989) based her main ideas of reflective thinking on the theoretical writings by Schön hence her use of 'Schönian' terminology. Powell proposed that reflection-in-action is likely to improve professional effectiveness as it promotes learning from experience. Her research findings suggested however, that nurses reflected-in-action mainly in order to describe and plan nursing actions, and that these nurses used reflective thinking to a much lesser extent to learn from nursing practice. Powell's study was significant because the outcome of her research findings challenged the notion that reflective thinking always results in learning. Powell maintained that learning from experience depends on one's personal learning style and the knowledge base present at the time of the experience. Interestingly, while many authors since then have referred to aspects of her research, her most important finding, the apparent lack of learning which is the central issue of reflective thinking, appears to be ignored.

Reflective Thinking as a Process

Although the nursing literature is not particularly clear or consistent in the use of different terms and concepts associated with reflective thinking, there is by and large consensus that it is a cognitive *process* that has an *outcome*. In other words, reflective thinking has to lead to a change of perspective, increased understanding, or altered behaviour. The following 'steps' or components are evident in much of the nursing literature reviewed.

Reflective thinking (most times referred to as 'reflection') has been described as a *deliberate cognitive activity* that can be considered the first step in the reflective

process. A person who reflects on an experience tends to focus his/her thoughts interactively on the action itself, the outcome of the action, and the intuitive knowing in the action. The focus of reflective thinking is on self and demands an acute awareness of one's feelings, thoughts and actions within a complex milieu of people and events. Most of the literature reviewed described reflection as a strategy for highly adaptive individualised learning (reflective learning) from experience. For learning to occur, the nurse needs first of all to be able to make sense of (comprehend/understand) the situation. To use Bloom's (1956) taxonomy: understanding or grasping the meaning of the experience is a pre-requisite to making use of the resulting ideas or knowledge (see chap. 2). Reflective thinking enables the analysis of situations by examining and learning from the relationship between and among those parts that make up the entire experience.

Reflective learning is the second step in the reflective thinking process and it may be the tool that facilitates the integration of (nursing) theory and practice. Reflective learning requires from the practitioner certain attitudes such as open-mindedness towards diverse ideas, and motivation towards genuine reflection. Self-questioning is inextricably linked to reflective thinking. It requires well-developed observation skills, a feeling of comfort within the (clinical) context, and time to reflect on, and discuss events. However, without action reflective thinking remains only an intellectual (learning) exercise and thus another step in the reflective process is needed which is commonly labelled 'reflective practice'.

Reflective nursing practice is the third, and last, step in the reflective process and is only achieved if new or adapted knowledge, obtained from reflective thinking on past and current clinical experiences, is used to influence future approaches to nursing practice. Reflective nursing practice can thus be envisaged as a continuous cycle of reflective thinking-on and in-experiences, gaining increased knowledge and insights as a result of these reflections (reflective learning), and applying this knowledge and insight into nursing practice in order to improve and further enhance the quality and effectiveness of nursing (Bailey, 1995; Burnard, 1991; Davies, 1995; Stockhausen, 1994).

Throughout much of the nursing literature it is emphasised that 'reflective practice' has gained acceptance among practitioners, and that it has become the cornerstone of, professional nursing practice.

Although the nursing literature gives the impression that every nurse can become a reflective thinker, the list of personal attributes required is quite extensive. The most frequently mentioned qualities are self-awareness, perceptiveness, sensitivity, imagination and knowledgeable, with the ability to analyse, interpret and synthesise. With nursing bodies now insisting on '*reflective practitioners*', it would be useful to consider the implications for the nursing profession if these high level qualities are not present in all practitioners.

Critical Reflective Thinking

The concept of 'critical' has become closely associated to reflective thinking, and many authors discuss or examine critical reflective thinking (often referred to as 'critical reflection') from a 'critical perspective' (Powell, 1989; Reid, 1993; Richardson & Maltby, 1995; Shields, 1995). As with the concept of reflective thinking, the term *critical* is confusing, especially as it is seldom clearly defined. Beyer (1987, p. 32) maintained that: "...critical thinking is one of the most abused terms in our thinking skills vocabulary. Generally it means whatever its users stipulate it to mean." Indeed, on the one hand the term '*critical thinking*' has been linked to day to day problem-solving, considering opposing viewpoints, reasoning, and an attitude of inquiry. On the other hand however, critical thinking has been described from the critical paradigm in which case it refers to thinking that goes beneath the surface structure of the situation, to expose the underlying, or hidden, assumptions and structures that constrain, as Hedin (1989, p. 81) pointed out: "... open discourse and autonomous and responsible action." Critical reflective thinking from this perspective would focus for example on how social contexts determine health and related policies, as well as examine what factors influence the allocation of (nursing) resources. A number of authors claimed that *critical reflective thinking* empowered nurses to take charge in matters concerning themselves and the way they act as professionals (Hawks, 1992; Johns, 1995; Reid, 1993; Royal College of Nursing, 1995). The Delphi work group, set up by the American Philosophical Association (1990, p. 3), produced the following consensus definition of a critical thinker:

... habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgements, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit.

Using the above consensus definition, it would be unlikely that all nurses possess, or could develop, the intellectual qualities required to be a critical thinker. Be that as it may, a number of nursing authors imply that, with practise, nurses are able to reach deeper levels of *critical* reflective thinking (Baker, 1996; Gross, Takazawa, & Rose, 1987; Paul & Heaslip, 1995). However, others found that the level of critical reflective thinking demonstrated by students and qualified staff was low and did not seem to change markedly over a two to three year period (Bauwens & Gerard, 1987; Ross, 1989; Valiga, 1983). Moreover, the benefits of *critical* reflective thinking for improved nursing practice are by no means certain. Limited research has been undertaken but no convincing relationship between critical thinking and clinical competence has been demonstrated (Matthews & Gaul, 1979; Maynard, 1996). The inclusion of the term *critical* in the literature concerning reflective thinking has, if anything, blurred the concept of reflective thinking even more.

Journal Writing

Ever since reflective thinking was identified as the method par excellence to master the art of nursing, researchers and educators have searched for ways to facilitate and stimulate this type of cognitive activity. A number of activities to facilitate reflective thinking have been proposed, ranging from story telling, role plays, and observations followed by feedback, to small group dialogue and journaling. The amount of literature that is available on journaling is overwhelming and suggests that many authors consider journal writing as the most beneficial tool for developing reflective thinking skills (Benner, 1984; Brown & Sorrell, 1993; Burrows, 1995; Durgahee, 1997; Kemmis & McTaggart, 1988; Paterson, 1995; Richardson & Maltby, 1995; Saylor, 1990; Shields, 1995; Stockhausen, 1994; Street, 1990; Taylor, Stewart, & King, 1995; Wong, Kember, Chung, & Yan, 1995). So popular is the notion of

journaling that it is in danger of becoming totally devoid of meaning. It is for this reason that closer attention to the concept of journaling is warranted.

Writing is a powerful medium for learning and a powerful means of facilitating reflective thinking. Writing in itself is a reflective process as the writer often rereads and rethinks the very descriptions and ideas in an attempt to clarify one's thought processes (Kottkamp, 1990). With journal writing the individual is required to think reflectively about aspects of, as well as the whole situation in order to analyse the event and one's own role and responsibilities. Furthermore, the individual is encouraged to explore alternative ways of interpreting and responding to the event, with the ultimate aim of developing new understandings and insights. Despite the popularity of journaling, a number of weaknesses can be identified. The first one relates to the privacy of the journal. There is no consensus among the authors as to whether the content of the journal should be shared with 'others', or kept private. Gray and Forsstrom (1991) argued that it is difficult to dialogue with one's journal as the writer is part of the event. Indeed, if journals are kept private then one needs to realise that there is no correction possible if one's reflective thought is misguided or inappropriate. It is only through true dialogue with others that individuals can learn from each other, uncover assumptions and prejudices, and open their mind for alternative points of view. Another weakness relates to memory where it is implied that journals help in the recall of events. As journals are typically written after the event, they do not reduce the problems associated with memory recall, or hindsight bias. Thus, the person might still forget certain aspects, or be biased in their thoughts because the final outcome of the event is already known. Lastly, journaling creates a problem of a different kind. Beside the fact that journaling will take quite a bit of time, there is the issue of; How to put it into words? Words are symbolic representations of thoughts and feelings, and a person's command of the language, and his/her ability to 'play' with descriptive words, influences the depth and quality of the reflective process. Therefore it could be argued that journal writing has more to do with the skill of writing, than with the skill of reflective thinking.

SUMMARY

The concept of reflective thinking is currently attracting widespread attention within nursing programmes and professional forums. The art of nursing can only be learnt and advanced in clinical practice. Both Benner and Schön maintain that reflective thinking plays an important role in mastering this aspect of professional practice. Such is the trust in the benefits of reflective thinking that nursing bodies and schools of nursing insist that nurses become *reflective practitioners*. Moreover, a number of professional nursing bodies, both here in New Zealand and overseas, have adopted reflective thinking as a fundamental component of professional nursing practice. The origins of reflective thinking were traced back to the educators of teacher-trainees, based on the ideas of Dewey. Within the nursing literature, the lack of definition and the overpowering influence of Schön's writings were very much evident. It was noted that Schön's terminology was used rather loosely and interchangeably as if there was little or no difference between the terms. Perceived advantages were often presented as conclusions even though little evidence existed to justify these claims due to the lack of research. Conceptual clarity and actual research into the nature of reflective thinking are important if one is to resist degenerating into polemic. It was argued that increased understanding of reflective thinking might shed light on how qualified nurses learn and/or refine the art of nursing within the reality of nursing practice. Gaining a better understanding of reflective thinking enables nurse educators to re-examine educational processes and strategies that involves the use of reflective thinking as a tool for learning. Special attention was given to two concepts that have been closely associated with reflective thinking: *critical* reflective thinking and journal writing.

THESIS OUTLINE

This thesis is divided into three parts. Part one, covering chapters 1-3, provides a general introduction to the study and the research method. Part two, covering chapters 4-6, concentrates on the research project itself. The third and last part is chapter 7 that contains the discussion of the research findings and the recommendations.

Chapter One: Introduction and Overview

This introductory chapter examined the development and use of the concept of reflective thinking within the nursing literature. A brief synopsis of the practice and art of nursing was presented in order to 'set the scene' for the reader. The chapter concluded with an overview of the remaining chapters of this thesis.

Chapter Two: Clarifying the Concept of Reflective Thinking

This chapter explores the development of reflective thinking in the general literature. The review traces the emergence and historical development of reflective thinking and related concepts. Special attention is given to the writings of Dewey (1933), Schön (1983, 1987), as well as authors who discussed the concept of reflective thinking from the critical perspective. Utilising their main ideas and the common themes that were found in a number of writings, the concept of reflective thinking is defined in order to establish a shared understanding with the reader.

Chapter Three: Research Methodology and Method

In chapter three the chosen research methodology is discussed. Particular attention is paid to the philosophical underpinnings of the Sense-Making approach. The research method is described in detail, and procedures in regards to participant selection and involvement, as well as the interview technique are discussed. Ethical considerations arising from this study and the precautions taken to protect the rights and confidentiality of the participants are addressed.

Chapter Four: Situations: Challenges, Emotions, and Feelings

This chapter is the first of three chapters that present actual data from the research. An extensive exemplar illustrates the use of the micro-moment time-line interview and the manner in which 59 micro-moments are identified. Each participant in the study is introduced as well as a short abstract of their clinical narrative. The importance of perception as an individual act of perceiving and interpreting stimuli or information is emphasised. Factors that contributed to the event being perceived as a challenge, and the accompanying emotions and feelings, are explored.

Chapter Five: Experience: Gaps, Confusions, and Questions

This chapter focuses on how participants made sense of their experiences. Interview questions centred on the perceived 'gaps' and on the strategies employed to overcome these gaps. Narratives are used to demonstrate the type of gaps faced by the participants as well as the influence and use of previous experiences in understanding the current situation. The use of self-questioning as a strategy for meaning making is identified as a significant stage in reflective thinking. The chapter finishes by identifying a range of internal and external conditions that prevent participants from understanding their contextual situation.

Chapter Six: The Use of Self-Questioning in Reflective Thinking

This chapter explores how information, gained from reflective thinking, is used by participants to gain a better understanding of their situation. By analysing the type of questions that participants generated themselves it is possible to determine the entity of reflective thinking in terms of time and situational focus. In regards to self-questioning, participants identified immediate as well as long term benefits.

Chapter Seven: Reflective Thinking: Making Sense Of It All

This chapter discusses the major concepts identified in the research. Reflective thinking is redefined in terms of its focus. Furthermore, the research findings resulted in the development of a dynamic process model of reflective thinking. Following from this, the implications for nursing practice and education are discussed and Sense-Making is suggested as a suitable framework for reflective thinking. Last but not least the limitations of the study are considered and suggestions for further research are provided.

CHAPTER TWO

DEFINING THE CONCEPT OF REFLECTIVE THINKING

INTRODUCTION

Although the concept of reflective thinking has been identified as an effective learning strategy for nurses in clinical practice (Fisher, 1996; French & Cross, 1992; Jarvis, 1992; Johns, 1995, 1996a; Reid, 1993; Richardson & Maltby, 1995; Saylor, 1990) the introductory chapter has highlighted a number of concerns. It was noted that there was an overall lack of clarity as to what reflective thinking is. Furthermore, the inconsistent use of the terminology, and the lack of actual field studies, resulted in confusion as well as unsubstantiated claims in the nursing literature. As many nursing articles concerning reflective thinking referred to Dewey (1933), Kolb and Fry (1975), Boud, Keogh and Walker (1985), Schön (1983, 1987) and others, their work is examined in depth to gain a better understanding of the origins of reflective thinking and related concepts. This chapter traces the emergence and historical development of the concept of reflective thinking.

DEWEY AND THE CONCEPT OF REFLECTIVE THINKING

Dewey (1933) was one of the first and most influential educational theorists to explore the process and product of reflective thinking. Few contemporary writings on the subject match the clarity and in-depth discussions that are found in Dewey's book, 'How we think'. As the foundation layer of what came to be known as 'reflective thinking', Dewey's work is of historical significance.

Dewey started his exploration of reflective thinking by discussing two different mental processes that were both labelled 'thought'. In regard to the first thought process he noted that the human brain often engaged in cognitive processes that consisted of mental streams of 'uncontrolled coursing' of ideas. Random recollections of thought, daydreams, reveries, castles built in the sky, and half-developed

impressions are examples of uncontrolled coursing, which according to Dewey, is largely automatic and unregulated.

Dewey maintained that there was another mental stream that was not unlike this random coursing of things through the brain. It differed however, in that these thought patterns were focused and controlled. Dewey labelled this 'reflective thought', and he argued that it is not simply a sequence of ideas, but a consecutive ordering in such a way that each idea/thought refers to its predecessors as well as determines the next step. Thus, all successive steps are linked. They grow out of one another, support one another, and contribute to a sustained movement towards a common end. "Only when the succession is so controlled that it is an orderly sequence leading up to a conclusion that contains the intellectual force of the preceding ideas, do we have reflective thought" (Dewey, 1933, p. 47).

Dewey used the terms 'reflection' and reflective thinking interchangeably, and he defined this activity as: "Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (Dewey, 1933, p. 9). The function of reflective thought was to: "... transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort, into a situation that is clear, coherent, settled, harmonious" (pp. 101-102). Dewey went on to say that reflective thinking required the person to be critical, willing to endure suspense, as well as undergo the trouble of searching for answers. Past experience and a 'fund of relevant knowledge' are fundamental pre-requisites for reflective thinking according to Dewey (pp. 15-16):

But unless there has been some analogous experience, confusion remains mere confusion. Even when a child (or a grown-up) has a problem, it is wholly futile to urge him to think when he has no prior experiences that involve some of the same conditions.

The Value of Reflective Thinking

According to Dewey reflective thinking possessed the following values:

- Reflective thinking emancipates the person from merely impulsive and merely routine activities as it enables actions to be directed with foresight, and to be

planned according to 'ends-in-view'. By weighing up the pros and cons of the different ways and lines of actions in the mind beforehand it: "... converts action that is merely appetitive, blind, and impulsive into intelligent action" (p. 17).

- Reflective thinking enables the person to develop and arrange artificial signs to give advanced notice of consequences, and of ways to secure and avoid them. Reflective thinking makes it thus possible to systematically prepare for, and intervene in events.
- Reflective thinking confers a very different status and value upon physical events and objects, thus enriching events or objects with a particular meaning and providing the person with increased power of control. Reflective thinking thus contributes to learning.

Dewey believed that reflective thinking arose out of situations of doubt, hesitation, perplexity, and/or mental difficulty, and that it prompted the person to search, hunt, or inquire, to find material that would resolve doubt, and settle the perplexity. Demand for a solution of a perplexity was the steadying and guiding factor in the entire process of reflection aimed at the discovery of facts that would serve this purpose. Dewey (1933, p. 236) maintained that: "Learning, in the proper sense, is not learning things, but the meanings of things . . ." He labelled the state of confusion, doubt or perplexity, as the pre-reflective period. This period revealed not only the problem to be solved, but also: "... the questions that reflection has to answer" (p. 107). Once the individual had dispelled the doubt, gained mastery over the situation, or created new knowledge as a result of this activity, the situation would become post-reflective thinking.

Required Attitudes for Reflective Thinking

Dewey recognised the full potential of reflective thinking for learning. At the heart of his ideal view of education was the idea of learning from experience through reflection. He identified three attitudes that are prerequisite for reflection:

The first attitude is 'open-mindedness' that may be defined as: ". . . freedom from prejudice, partisanship, and such other habits that close the mind and make it unwilling to consider new problems and entertain new ideas" (p. 30). Open-mindedness requires the person to actively listen to more than one side, to consider all facts, to examine alternative possibilities, and to recognise the possibility of error.

The second attitude required for reflection is sincerity or 'wholeheartedness', which referred to the person's undivided attention, a thorough interest, and a genuine enthusiasm in some object or cause. He maintained that there was no greater enemy of effective thinking than divided interest. Dewey (1933, p. 31) argued that only if the person is fully absorbed will the subject carry him/her on:

Questions occur to him spontaneously; a flood of suggestions pour in on him; further inquiries and readings are indicated and followed; instead of having to use his energy to hold his mind to the subject, the material holds and buoys his mind up and gives an upward impetus to thinking.

The third and final attitude is 'responsibility'; to be intellectually responsible is to separate sense from nonsense, to synthesise diverse ideas, to consider consequences and implications, and a willingness to adopt these consequences. Dewey maintained that intellectual responsibility: ". . . secures integrity; that is to say, consistency and harmony in belief" (p. 32).

Dewey maintained that sensitivity, imagination, the power to reason, and the ability to analyse and synthesise are important qualities for reflective thinking. He acknowledged the importance of past experiences for reflection as he argued that ideas and suggestions are: ". . . dependent in any case on one's past experience; as they do not arise out of nothing" (p. 117).

The Five Phases of Reflective Thinking

Dewey maintained that reflection was the key tool for our own transformation and he identified five phases or aspects of reflective thought:

1. Suggestions, in which the mind leaps forward to a possible solution;

2. Intellectualisation of the difficulty or perplexity that has been felt into a problem that needs to be solved, a question for which an answer must be sought;
3. The use of one suggestion after another as a leading idea, or hypothesis, to initiate and guide observation and other operations in collection of factual material;
4. The mental elaboration of the idea or supposition as an idea or supposition (logical reasoning about the problem and methods of solution);
5. Testing the hypothesis by overt or imaginative action. (p. 107)

Dewey suggested that there might even be a sixth phase or aspect of reflective thought. This phase in reflective thinking involved a forecast, an anticipation, or 'look' into the future.

Learning and Reflective Thinking

In regards to learning from experience, Dewey outlined and discussed two different thought processes involved in reflective thinking: the empirical and the scientific. When thinking empirically, the individual attempts to link cause and effect in a given experience. While Dewey saw empirical thinking as an important aspect of learning he did warn about the over-reliance on this method of thinking, and highlighted three disadvantages of empirical thinking:

- Empirical thought affords no way of discriminating between right and wrong conclusions, leading to false beliefs;
- Empirical inference follows the grooves and ruts of past similar experiences and as such empirical thought is unable to cope with the novel;
- Empirical thought can lead to mental inertia and dogmatism since the mind naturally demands some principle of continuity, some connecting link between separate facts and causes.

Dewey differentiated between empirical and scientific thought, by maintaining that while the former concentrated on single comprehensive facts to explain and make sense, the latter method of thinking attempts to break up the 'coarse' or comprehensive facts of observation into a number of smaller components or

processes. The scientific method allows thus for analysing *varying* conditions in order to synthesise the findings.

In summary it must be noted that throughout his work Dewey referred to 'reflective thinking', 'reflective thought', and 'reflection'. He saw these terms as concerning one and the same concept that enables individuals to make sense of, and learn from, day to day experiences. It is important to re-emphasise at this point that Dewey did not equate 'learning' with learning theories or concepts related to 'things', but with learning the 'meaning' of things. This study will adopt the same terms as Dewey, and similarly use the terminology of reflection and reflective thinking/thought interchangeably.

REFLECTIVE THINKING IN TEACHING AND LEARNING

Reflective thinking has become an important concept in education, and can be found in a variety of writings concerning teaching and learning. For example Bloom (1956) constructed a 'taxonomy' of the cognitive domain in an attempt to classify educational outcomes. The taxonomy was the result of increasing concerns at the time about the large amount of instructional time spent on 'knowledge', while very little emphasis was placed on the higher mental processes that enabled students to apply their knowledge creatively (Anderson & Sosniak, 1994). Although Bloom didn't mention the term reflection or reflective thinking specifically, the concept is implicit when he referred to the evaluative process of experiences and situations that might lead to new knowledge and understanding.

Bloom ranked educational behaviours from simple to complex, based on the idea that a number of simple behaviours may become integrated into more complex behaviour. His taxonomy contained six major classes:

- First level: Knowledge; while knowledge is involved in all the categories of the taxonomy it differs from the others in that remembering or recall is the major process involved here.
- Second level: Comprehension; refers to the ability to understand or grasp the meaning and intent of what is being communicated.

- Third level: Application; is the ability to make use of ideas or knowledge. To apply something requires comprehension of the method, theory or principle.
- Fourth level: Analysis; is the ability to breakdown 'structures' into their constituent parts to examine the relationships of the parts and how they are organised.
- Fifth level: Synthesis; is the process of recombining parts of previous experience with new material in such a way as to construct a new and more or less well-integrated whole.
- Sixth level: Evaluation; refers to making a judgement about the value of the method, idea, solution or action.

Information or knowledge is regarded as an important outcome of education, but this in itself is not sufficient. Bloom insisted that students should be able to do something with their knowledge. Thus, when the student encounters a new problem or situation, he/she should be able to select an appropriate technique and bring to bear the necessary knowledge, including previous experiences, in an attempt to resolve the problem. In this aspect, Bloom's ideas closely resembled those expressed by Dewey.

Although Bloom's taxonomy appears to be a rigid hierarchical and linear structure of learning this need not be so. Bloom acknowledged that: "It is quite possible that the evaluative process will in some cases be the prelude to the acquisition of new knowledge, a new attempt at comprehension or application, or a new analysis or synthesis" (p. 185). Bloom also stressed that the validity, accuracy, and meaningfulness of information are relative in many ways, and always relate to a particular period in time. He stated that: "Truth and knowledge are only relative . . . there are no hard and fast truths which exist for all time and places" (p. 32).

REFLECTIVE THINKING AND EXPERIENTIAL LEARNING

Dewey's ideal of learning from experience was given renewed impetus in 1975 when Kolb and Fry incorporated reflective thinking in an experiential learning model. Their model, generally known as 'Kolb's Learning Cycle', described four related stages within the learning process; concrete experience, observation and reflection, formation of abstract concepts and generalisations, and testing implications of

concepts in new situations. The strength of this model is its ability to incorporate and demonstrate, in a relatively simplistic way, the connections and relationships between experience and learning. Kolb and Fry did not emphasise reflective thinking as a separate entity, but they did mention the need for learners to observe and reflect on their experiences from different perspectives, in order to interpret and integrate new or expanded wholes into the cognitive processes. The learning cycle emphasised the importance of experience within learning situations and supports Dewey's notion that reflective thinking is part of every day life (see Figure 2.1). The model's weakness is found in the fact that it ignores the individual's ability to switch mentally backwards and forwards depending on the context, and the individual's unique way of dealing with, and learning from the situation. Thus a person might read about an abstract concept and 'take a step back' to reflect on it, rather than go further and engage in active experimentation. Kolb's model does not accommodate such a scenario as indicated by the arrows that point only in one direction.

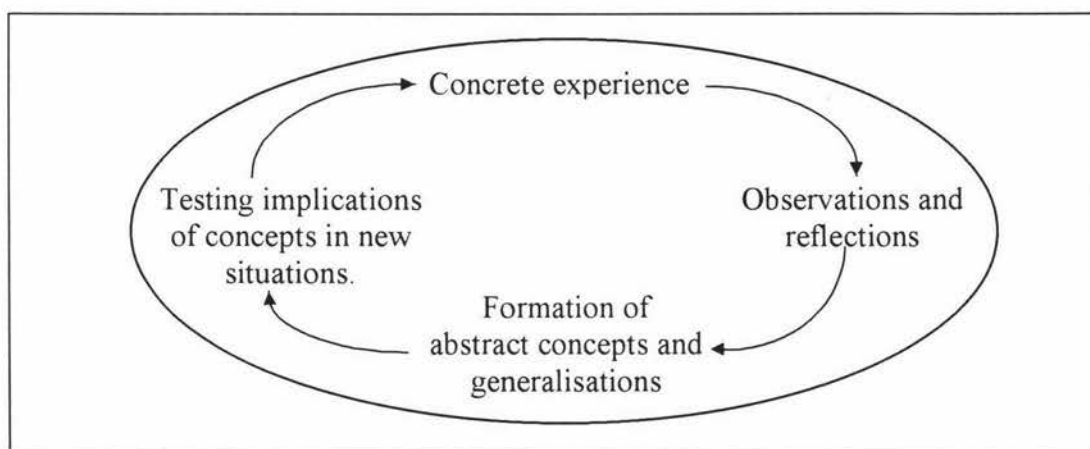


Figure 2.1. Kolb's description of the learning cycle. (Kolb & Fry, 1975).

The Process of Reflective Thinking

Boyd and Fales (1983) based their study on Dewey's work concerning reflective thinking, and they noted that learning from experience had received considerable attention in the literature of education and humanistic psychology. The authors maintained that much of the research tended to focus on the outcomes of reflective learning, rather than on the processes involved as experienced personally by individuals. Their central concern therefore was to describe the essential nature, or process of reflection. The authors defined 'reflection' as: "... the process of creating and clarifying the meaning of experience (present or past) in terms of self (self in

relation to self and self in relation to the world)" (p, 101). Similar to Dewey, Boyd and Fales stressed that the outcome of reflection is a changed conceptual perspective. Although the authors used a variety of methods to collect their data, the repeated interviews with nine, self- or referral-identified, 'reflective' persons contributed to the bulk of the information obtained.

Examining the processes involved in reflection, the authors identified the following six components:

1. A feeling of inner discomfort;
2. Identification or clarification of the concern;
3. Openness to new information from internal and external sources;
4. Resolution, expressed as 'integration', 'coming together', 'acceptance of self-reality', and 'creative synthesis';
5. Establishing continuity of self with past, present, and future self;
6. Deciding whether to act on the outcome of the reflective process.

These processes are very similar to the processes described by Dewey. The notion of 'inner discomfort', as identified by Boyd and Fales, was labelled as situations of doubt, hesitation, and perplexity by Dewey, while the identification or clarification of concerns clearly related to Dewey's belief that the individual is prompted by the situation to search, hunt, or inquire to find information. The following three components (3 to 5) can be found in Dewey's three attitudes, these being respectively: open-mindedness, wholeheartedness, and responsibility. The sixth, and last, component is directly related to the growth and development of the individual as a result of reflective thinking.

Interestingly, even though the participants were considered 'reflective' individuals, Boyd and Fales' research revealed that when asked, these participants were only vaguely aware of their reflections, furthermore, no-one had considered it as something they could control or use as a learning tool (reflective learning). Boyd and Fales noted that reflection is a 'natural' process of which people might not even be aware, and concluded that the mere naming and valuing of the process are the first steps in the use of reflection as a tool for learning.

SCHÖN AND THE CONCEPT OF REFLECTIVE THINKING

Among the contemporary writings, perhaps the most significant study on reflective thinking has been Schön's work which resulted in two books, 'The reflective practitioner' (1983) and 'Educating the reflective practitioner' (1987). Almost every publication concerning reflection in the nursing literature refers to Schön's study, and his concepts are widely accepted by nurse educators. It is for this reason that extra attention is given to his work.

Schön (1983, 1987) based his work on Dewey's notion of reflective thinking, but while Dewey focused on the processes involved, Schön tended to concentrate on the outcomes of reflective thinking. This change of focus was possibly the result of work Schön had done previously with Argyris (1974) on theory development in practice. The main outcome of that particular work was the discovery of two distinct types of theory: espoused theory and theory-in-use. Espoused theory, according to these authors, was abstract and generalised theoretical knowledge, while theory-in-use was the theory developed by practitioners as a result of experiential learning in the 'real' context of professional practice (see also chapter 1).

As a result of this earlier work, Schön became particularly interested in the education of professional groups and the development of theories from practice. His concern regarding the educational aspects of professionals focused especially on two areas:

- Firstly, that the problems of real-world practice do not present themselves to practitioners as well-formed structures and therefore professional practice is not the simple application of theory to practice.
- Secondly, that new knowledge is established in the learning situation when practitioners reflect upon their experience of the situation. Schön maintained that these features were common across a range of professions.

As Schön (1983, pp. 15-16) so aptly put it: "The situations of practice are not problems to be solved but problematic situations characterised by uncertainty, disorder and indeterminacy." Schön used the term 'frame' to express the sort of mini-paradigm that practitioners construct from their situation. As such, frames are: ". . . ways in which individuals construct the reality in which they function" (Schön 1983,

pp. 309-310). He argued the importance of exploring the differences in the framing of problematic situations that enabled practitioners 'to make sense' of confusing predicaments (Schön, 1992).

Reflective Practice

While not dismissing academic knowledge, Schön emphasised the importance of theory-in-use knowledge or practice-based knowledge, which could only be gained through the process of *reflective practice*. Even though Schön didn't specifically mention reflective 'thinking', he referred extensively to Dewey's work in regards to 'learning from experience' and 'learning by doing' thereby implying the pivotal role of reflective thinking. His use of the term *reflective practice*, emphasised the importance of the role of *practice* for the development of 'know how', as well as the knowing and skills required in the 'real' world of professional practice. However, while Dewey identified reflective thinking as a mental activity common to all human beings, Schön (1983) separated the concept from general usage by applying it solely to situations of 'professional practice' and claiming reflective thinking as an epistemology of practice. As a result of this approach, Schön developed the following key-concepts:

- Reflection-in-action: Refers to the reflective thinking the person is engaged in while he/she is doing the action. The person thus reflects during the action on the understandings that are implicit in the action and on the feelings and rationale that led to the adoption of this particular action sequence. Reflection-in-action therefore influences and reshapes what one is doing while one is doing it.
- Reflection-on-action: Occurs, in contrast to reflection-in-action, after the experience has taken place. The practitioner reflects on the experience and explores his/her understandings in the light of the outcomes of the action. It is thus a type of 'cognitive post-mortem', as it will not change the past experience in itself. However, the outcome of this reflective thinking process might influence future actions.

The Function of Reflective Practice

Schön (1983) provided a general description of the functions of reflective practice; the ability of the professional to integrate experience, theory and research in the formulation of solutions to the unique and complex problems of practice, but he did not offer a definition of reflection or reflective practice. Schön claimed that the assumptions, that academic research yields useful professional knowledge, and that professional knowledge taught in schools prepares students for the demands of real-world practice, were both increasingly called into question. He argued for a change in education as he felt that the school's normative curriculum and separation of research from practice leaves no room for reflection-in-action and as a result creates a dilemma of rigour or relevance. Rigour, as used by Schön, refers to the potentially 'stifling' effects propositional knowledge can have on the skills displayed by the professional, because of the definitions, rules, codes, theories, standards and procedural operations learnt in a classroom or laboratory setting. According to Schön, such propositional knowledge might not be particular relevant in the constantly changing and unique situations in the 'real world' of practice. Schön believed that practitioners build up a 'repertoire' of examples and understandings from their practice. Practitioners will 'scan' this repertoire by means of reflection, and compare past experiences with the present to identify similarities and differences in order to select the most appropriate response to the current situation. Schön maintained that reflection enabled the individual to create meaning, to get a better understanding of the situation. This in turn led to the following concepts:

Knowing-in-action: Refers to the types or sorts of know-how that are inherent in the action itself although the performer is characteristically unable to verbalise this knowledge.

Knowledge-in-action: Refers to the knowledge gained from verbalising or describing 'knowing', from making explicit the knowing-in-action.

According to Schön (1987), reflection allowed the practitioner to *rethink* the knowing-in-action in ways that go beyond learnt rules, theories, and operations, and enabled the practitioner to make sense of, and learn from uncertain, unique, or conflicting practice situations. Knowing-in-action, he goes on to say, always involves

'constructions'. It is only through reflection-in-action that the practitioner builds up, or constructs, a repertoire of examples, images, understandings, and actions. Constructions are thus: ". . . attempts to put into explicit, symbolic form a kind of intelligence that begins by being tacit and spontaneous . . . For knowing-in-action is dynamic, and 'facts', 'procedures', 'rules', and 'theories' are static" (Schön 1987, p. 25). Schön maintained that students can not be taught what they need to know, but they can be *coached*. The coach is an experienced practitioner who works in very close collaboration with the student, thus enabling the less experienced to grasp the significance and the art of practice. Schön advocated a model of coaching that included three different and complementary approaches to assist students to learn from practice.

Practice versus Practicum

While discussing learning from experience, Schön made a clear distinction between *practice* and *practicum*. This distinction is of crucial importance for this study, which attempts to research reflective thinking in nursing practice. Schön maintained that *practice* relates to the 'real world', the work environment in which practitioners typically carry out their 'usual' roles and functions. *Practicum* however, is very different, and Schön provided the following description:

A practicum is a setting designed for the task of learning a practice. In a context that approximates a practice world, students learn by doing, although their doing usually falls short of real world work. The practicum is a virtual world, relatively free of the pressures, distractions, and risks of the real one, to which nevertheless, it refers (Schön, 1983, p. 37).

There is an inherent tension within Schön's writings, as far as it relates to learning in *practice* and *practicum*, which are difficult to resolve. Schön maintained for example that practical knowledge could only be learnt in *practice*, in the 'real' world. Yet, when discussing student learning his '*practice*' becomes a '*practicum*', a virtual world, relatively free of the pressures, distractions, and risks of the real world. While such virtual worlds are able to contribute to increased learning, it needs to be acknowledged that such a 'practicum world' can not always be created. The finding that it was possible in Schön's situation might be entirely due to the fact that his notion, of reflection as an epistemology of practice, concerned practitioners such as

engineers and architects, who deal mainly with inanimate objects. For these practitioners it might be possible to create real world situations in a virtual world, but surely, this can not be applicable to practitioners who deal directly with human needs such as doctors, teachers, and nurses. For the latter type of practitioners only the real world, with all its pressures, distractions, insecurities, conflicts, and risks, is able to provide the learning situations and opportunities required, to grow as a professional.

The Role of Experience

Schön has quite rightly demonstrated that practice, especially expert or competent practice does not come from a theoretical frame only. Rather, it is multi-dimensional; it has a tacit dimension, an artistic dimension or feel for the situation, and a problem-solving dimension or intuition. The practitioner's *art* refers to the skills the practitioner requires to work through the uncertainty, instability, and uniqueness of the situation, by using intuition, analogies and metaphors in order to help frame the problem and set priorities. A reflective practitioner does not approach problems as copies of generalised theory, but rather as unique, personal and situational instances. Schön is extensively quoted in the nursing-education literature, possibly because of his educational focus and his insistence that professional 'know how' can only be learnt in the context in which professionals (including nurses) practice, yet his ideas are not necessarily suitable and/or applicable to nursing education. In his writing Schön (1983, 1987), described how *experienced* practitioners learnt from each new situation, how the experience enriched the practitioner's repertoire of exemplary themes from which new variations could be composed in subsequent cases. The key word here is *experienced* practitioners. Schön argued that practitioners could only develop theories-in-use through repeated exposure and successful practice in a range of situations. However, students of nursing, and beginning practitioners for that matter, have very limited exposure to the 'real professional world', and thus little experience. Furthermore, the students' experience takes place in *practice*, with all the stresses and strains that are part and parcel of the real world, even though Schön advocated a *practicum* setting. Whether students of nursing placed in a practice setting can learn in a similar reflective fashion as experienced practitioners is by no means certain.

Concluding Remarks on Schön's Writings

Schön's work originated from Dewey and yet it differs in two important aspects from Dewey. The first aspect has already been commented on and related to the transition of reflective thinking from the 'main-stream' of learning to an 'epistemology of practice'. The second significant deviation is the absence of 'anticipatory reflection'. While Schön identified reflection-in and on-action, it is somewhat surprising to note that nowhere in his writings did he indicate the possibility of anticipatory reflection, or reflection-before-action, the inherent ability of human beings to look ahead and prepare mentally for future events. Dewey (1933) believed that foresight and planning was a significant aspect of reflective thinking, and one that sets humans apart from the animals. Indeed, mental focusing on the clinical experience prior to the actual placement is an essential and effective strategy to lower students' anxiety level and to increase potential learning opportunities (Stockhausen, 1994). It is a concern to this author that, in spite of extensive references to Schön's work, only Greenwood (1993a) and Fitzgerald (1994) discussed the discrepancies that exist between the 'real' world of clinical nursing 'practice and Schön's virtual world of the 'practicum'.

REFLECTION AS BLENDING 'WAYS OF THINKING'

While Schön claimed reflection as an *epistemology of practice*, Goodman (1984) returned the concept to where it originated. Although Goodman also used the term 'practicum' in a similar meaning as Schön, and stressed the need for a conducive environment in order for genuine reflection to take place, his ideas have little in common with Schön's work. Goodman examined the process of reflective thinking and supported Dewey's notion that reflection is more than a method of problem solving and that it is 'a way of thinking and being'. Goodman maintained that three areas of concern need to be examined in order to develop a theory of reflection: (1) the focus of reflection, (2) the process of reflective thinking, and (3) the attitudes required for reflective thinking. In regards to the 'focus of reflection' Goodman used the writings of Van Manen (1977), who maintained that there are three levels at which reflection occurs: the empirical/analytical, the practical, and the critical/emancipatory. In regards to the 'process of reflective thinking' Goodman identified three ways of thinking of which 'routine thought' is the first. Tradition, authority, and official definitions of social reality, within a given setting guide a person who thinks

routinely. Routine thought, according to Goodman, is in direct opposition to reflective thought. The second way of thinking is 'rational thought'. A person engaged in rational thinking will process information logically and sequentially. External views of reality are only accepted after careful and critical analysis of relevant information and a decision is reached through deductive reasoning. The third way of thinking is 'intuitive thought', which involves a mixture of holistic perception, creativity, imagination, emotion, tacit sensitivity and understanding, insight and empathy. Goodman maintained that reflective thought is the combined product of integrating rational and intuitive thought processes. While routine thought is seen as the antithesis of genuine reflection: ". . . reflective individuals are able to blend rational and intuitive modes of thinking in one dynamic thought process" (Goodman, 1984, p. 20).

REFLECTIVE THINKING AS A MULTI-FACETED CONCEPT

Goodman's study demonstrated the complexities involved in reflective thinking, a finding supported by Boud, Keogh, and Walker (1985) who maintained that reflection is not a single faceted concept, but rather a generic term to describe a number of important ideas and activities. People learn in a variety of situations and contexts and indeed, most learning occurs as part of every day life, either during work, play or other activities (Boud et al, 1985). The authors based their work on Dewey who maintained that there were two kinds of experiential processes that led to learning: The first process was trial and error that is of limited value to the learner. The second process was reflective activity, which involved the perception of relationships and connections between the parts of an experience. In line with this, Boud et al. maintained that reflection, in the context of learning, was: ". . . those intellectual and affective activities in which individuals engage to explore their experiences in order to gain new understandings and appreciations" (p. 19). It is a human activity which is pursued with intent, and in which both feelings and cognition are closely interrelated and interactive. Their claim, that experience in itself is not the key to learning, is supported by Jarvis (1992) and James and Clarke (1994), who argued that repetitive experiences might result in 'routine' responses that do not involve any higher order thinking at all and may lead to habitualisation. Reflection, according to Boud et al. (1985), is a purposive activity directed towards a goal. People need to purposely recollect their experience, think about it, mull it over and evaluate it. Being

professional educators it is not unexpected that Boud et al. almost completely centred on aspects related to learning. The authors saw reflection as part of learning and they restricted the scope of their discussions to 'deliberate' reflective learning only.

The Stages of Reflective Learning

Because reflective learning from experience is a goal directed activity, Boud et al. (1985) argued that it is important for the person to anticipate the experience and, ideally, to be mentally prepared for it. The idea of mental focusing can also be found in the writings of Dewey in regards to foresight and planning. Following the experience the person tries to make something of the encounter. Through reflection, new insights are gained from the experience, which contribute to the person's general knowledge base, and influence subsequent behaviours and actions. The difference between Dewey and Boud et al. become very obvious at this point. While Dewey saw reflective thinking arise almost 'naturally' out of situations of doubt, confusion, or perplexity, the latter authors conceptualised reflection in terms of a tool that can be mobilised at will in order to facilitate learning. As a result of this, Boud et al. described three stages that are believed to be important in the reflective process:

- Stage 1. Returning to the experience: This happens when the individual recollects the events in their own mind, or recounts to others the features of the event.
- Stage 2. Attending to feelings: The individual needs to focus on positive feelings about learning and the experience. Removing obstructive feelings is a necessary precursor in order to remove impediments to a thorough examination of the experience.
- Stage 3. Re-evaluating experience: There are four elements or aspects that need to be considered in this stage:
 - 1. Association - relating new data to pre-existing knowledge;
 - 2. Integration - a process of discrimination which examines the nature of relationships, drawing conclusions and arriving at insights;
 - 3. Validation - the 'reality test', testing for internal consistency between existing knowledge and new appreciations;
 - 4. Appropriation - making knowledge part of one's value system.

While much of the day to day experiential learning is unstructured and unintentional, one could almost call it 'accidental learning', the learning that results from reflective thinking is different in that it is an 'intentional' process. Reflection is thus an intentional cognitive activity of the individual to learn, to gain new knowledge and insights from the experience. The reflective process as described by Boud et al. shows definite similarities to the concept of reflection-on-action as outlined by Schön (1983). Figure 2.2 represents the model of reflection in the learning process as developed by Boud et al.

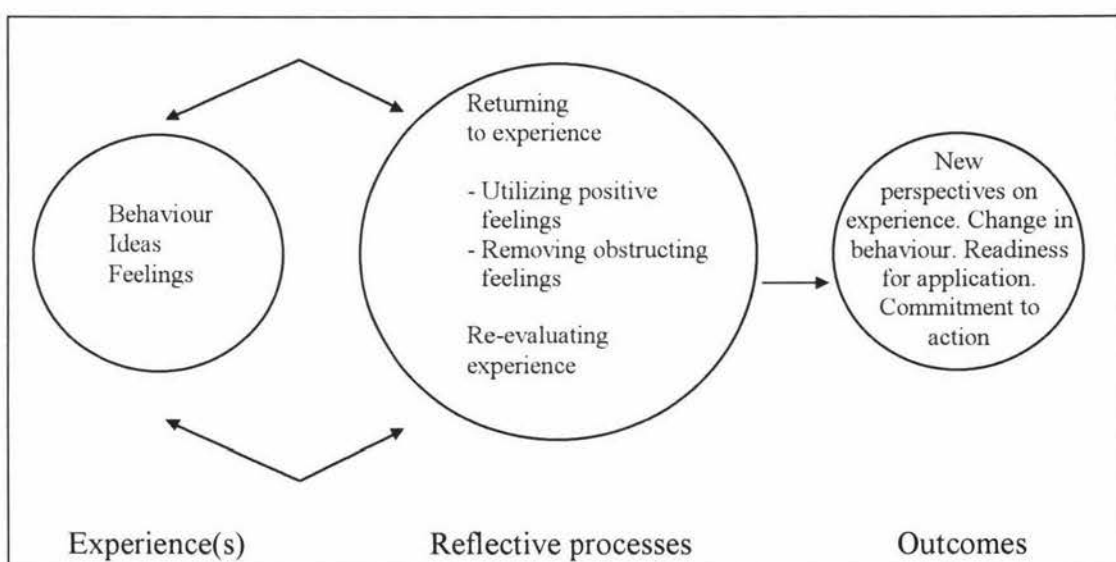


Figure 2.2. The reflection process in context. (Boud et al, 1985).

THE CONCEPT OF CRITICAL

Critical thinking was mentioned as an important component of reflection by many authors (most notably by Dewey, 1933; Habermas, 1974; Mezirow, 1981; Goodman, 1984; Kemmis, 1985). In fact, quite a few of these authors believed that critical thinking is a cognitive process grounded in reflection. There is currently no universal definition or conceptualisation of critical thinking and, as was noted in the introductory chapter, the term 'critical thinking' is one of the most abused concepts (Beyer, 1987).

Dewey (1933) maintained that thinking is only reflective if it is critical. He didn't provide a definition of what he meant with this term but his writings clearly indicated that critical thinking was the equivalent of genuine thoughtfulness, of thorough inquiry. Thus a 'critical' reflective thinker should never jump to conclusions without examining all the facts and weighing the grounds on which it does not rest, nor should he/she accept an idea or make positive assertions of beliefs until justifying reasons have been found. Critical thinking is an integral part of reflective thinking and Dewey maintained that reflective thinking emancipated the person from impulsive and/or routine activities. Furthermore, such reflective thinking enabled the person to plan actions with foresight and intellect resulting in increased power of control.

Goodman (1984) argued that critical thinking is a mixture of rational thought blended with intuitive thought. Indeed, critical thinking per se is not contrary to intuition. Intuition requires critical thinking to distinguish what we truly know from what merely seems to be so, while critical thinking needs the direct perception of intuition to analyse the whole situation. Critical thinking requires a willingness to acknowledge the extent of one's ignorance, a commitment to think clearly, precisely, and accurately. Critical thinkers reason things through in a way that is disciplined, and yet creative. Critical thinking then, is an orientation to cognition grounded in reflective thinking that allows a tolerance for ambiguity rather than a linear approach to problem solving (Jones & Brown, 1993).

Within the existing nursing literature a clear change in the interpretation of *critical* could be noted with the shift away from Dewey towards theorists who are sympathetic towards the ideology of Critical Theory. Reflective thinking within the Critical Theory paradigm advocates a challenge towards entrenched positions and inequalities. It challenges the 'taken for granted' view by emphasising the consequences of actions, and arguing the need for emancipatory actions leading to social reconstruction and equality.

REFLECTIVE THINKING FROM A CRITICAL PERSPECTIVE

A number of authors, among them Freire, Van Manen, Mezirow, and Kemmis, have discussed the concept of reflective thinking from a Critical Theory paradigm. Because the nursing literature frequently refers to their writings, no exploration of the concept of reflective thinking is complete without paying closer attention to their work. The reader is reminded that within this current study reflection and reflective thinking have similar meanings and both terms are used interchangeably.

Freire (1974) used the term 'reflection' frequently in his writings concerning the oppressed people of Brazil. Although he did not provide a definition of reflection, he maintained that reflection occurred in the challenge of *living* and *thinking* about life with the ultimate aim that people understand their own situation and become empowered to change that situation if they wish to do so. Reflective thought, which was the product of reflective thinking according to Freire, was an on-going process of dialogue to resolve problem-posing situations. He noted that reflection has a historical, social, ideological and political dimension since it is action orientated; "we know in order to do" (Matthews, 1980, p. 92). Freire described this kind of self-conscious critical analysis as conscientisation: "... the process in which people, not as recipients, but as knowing subjects, achieve a deepening awareness both of the sociohistorical reality which shapes their lives and of their capacity to transform that reality" (Freire, 1970, p. 27).

Freire's ideas about education are important for nurse educators, especially as they relate to adult education and the use of reflection. Freire argued that it is impossible for education to be neutral. He believed that neutrality in education always conceals choice. Education is either for the liberation and humanisation of people, or for their domestication and domination. He acknowledged the existence of a non-reflective approach to learning that he called the 'banking' concept of education. In the latter approach, teachers 'deposit' packages of knowledge in the students. He argued that the banking concept of education reduced the need for students to think critically or creatively. It diminished the students' ability to solve problems and contributed to a power imbalance as the teacher is in control of what and when things are learnt. Where the learner is defined as a passive object, a context is created wherein the

student becomes not only dependent, but also mute in the face of superior knowledge. Such an education, Freire declared, only served the interests of oppression.

Levels of Critical Reflection

Most literature concerning 'reflection' discusses the concept as part of, or how it relates to, learning from experience. Van Manen (1977) is no exception to this, but what is interesting is that he argued that the concept of 'practical' is little understood and he posed the question how teachers (nurses) make practical use of the knowledge available to them. According to Van Manen it is only through critical reflective thinking that the questions of greatest importance to the practical can be adequately addressed. His study is significant in that he outlined three levels of reflective thinking, which build upon each other, each emphasising a different focus on practical:

- On the first level, Van Manen maintained that reflective thinking is mainly concerned with means rather than ends and focuses on sets of empirical-analytical theories and principles that can be applied to practice. He asserted however that few such principles exist in regards to the social sciences. Indeed, nursing research has difficulty demonstrating that some nursing models/theories are more appropriate or effective in achieving specific outcomes than others, and equally, nurse educators are unable to provide general theoretical solutions to unique practical problems.
- On the second level, reflective thinking focuses not on the application of theories and principles, but on the relationship between these and the practical. Reflection at this level is concerned with analysing and clarifying individual and cultural experiences, meanings, perceptions and assumptions for the purpose of adapting practical actions as well as assessing the implications of both actions and beliefs. The emphasis is on an interpretive understanding (*Verstehen*) both of the nature and quality of the nursing experience, and of making practical choices.

- On the third and highest level, reflective thinking aspires to genuine self-understanding, emancipatory learning, and critical consciousness. Reflection at this level incorporates ethical and socio-political concerns. Applied to nursing, principles such as equality, justice, and empowerment could be used as criteria to reflect on the value of nursing goals and nursing practice, as well as on the role, and power of the nurse.

Van Manen's views concerning reflection differ in a number of important aspects from Schön (1983, 1987). Like Dewey (1933), and Boud et al. (1985), Van Manen believed that anticipatory reflection is an important part of reflection. As noted before, Schön never mentioned this type of reflection. In his later work Van Manen also disagreed with Schön's views regarding reflection-in-action. According to Van Manen (1991, p. 101), reflective thinking during action cannot take place because we: "... do not usually have the time or opportunity to reflect."

While Van Manen identified three levels of reflective thinking, Mezirow (1981) identified seven levels. Although he used the phrase 'reflectivity' instead of reflection, it is clear that his writings referred to the same concept that others have coined reflection or reflective thinking. For Mezirow (1981), the act of reflection involved the assessment of one's assumptions implicit in beliefs and actions. This is a very clear departure from all previous authors except Freire, as the focus is on self and the emphasis of reflection is on one's 'assumptions' of, rather than situations of doubt and perplexities within given experiential contexts. Furthermore, Mezirow maintained that: "... it is only in late adolescence and in adulthood that a person can come to recognize being caught in his/her own history and reliving it" (p. 11). This is an important notion as it indicates that people need to have reached a certain degree of maturity and life experience in order to be able to reflect 'critically'. Mezirow described reflectivity as an important and essential function of adult learning that is triggered off by a 'disorientating dilemma' that leads to self-examination.

Mezirow produced a theory of reflectivity and differentiated seven levels of reflectivity in a hierarchical order and which involve both, affective and cognitive aspects of learning:

Reflectivity:	an awareness of a specific perception, meaning, behaviour, or habit;
Affective reflectivity:	an awareness of how the individual feels about what is being perceived, thought or acted upon;
Discriminant reflectivity:	the assessment of the efficacy of perception, thought, action or habit;
Judgmental reflectivity:	making and becoming aware of value judgements about perception, thought, action or habit;
Conceptual reflectivity:	self-reflection which might lead to a questioning of whether good, bad or adequate concepts were employed for understanding or judgement;
Psychic reflectivity:	recognition of the habit of making quick judgements on the basis of limited information;
Theoretical reflectivity:	awareness that the habit for uncritical judgement or for conceptual inadequacy lies in a set of taken-for-granted cultural or psychological assumptions which explain personal experience less satisfactorily than another perspective with more functional criteria for seeing, thinking or acting.

Mezirow referred to the first four levels as 'consciousness' and he suggested that these lower levels of reflectivity are only relevant to non-reflective learning processes. The last three levels are seen as higher order levels and he referred to these as 'critical consciousness'. Critical reflection occurs when the person challenges the existing and habitual patterns of expectations, and questions the validity of a long-taken-for-granted view. Mezirow argued that critical reflection liberates the person from habitual ways of thinking and acting. Mezirow's levels of reflection bear little resemblance to those developed by Van Manen, although aspects of Mezirow's higher order levels ('critical consciousness') can be found back in Van Manen's third level.

While Freire (1970), used the term 'conscientisation' to describe the process by which one's false consciousness becomes transcended through education, Mezirow labelled this process 'perspective transformation'. There is considerable agreement between Freire and Mezirow's studies at this point. Both maintained, as did Dewey, that as an

outcome of the reflection, the individual has the potential to act upon their new insights or convictions and to correct distortions and errors in one's beliefs.

Kemmis (1985) too examined reflection from a critical perspective and maintained that reflection is a 'political act' which either hastens or defers the establishment of a more rational and just society. Of special interest to the current study is his claim that reflective thinking is a dialectical process in that it looks inward at our thoughts, and outward at the situation in which we find ourselves. "Reflection is thus 'meta-thinking' (thinking about thinking) in which we consider the relationship between our thoughts and action in a particular context" (p. 141).

Similar to Freire, Kemmis (1985) argued that reflection is action-oriented, social and political, its product is 'praxis'. Kemmis distinguished three parallel forms of reflection that are not too dissimilar from those developed by Van Manen:

- Problem-solving; reflection to identify a problem as a problem, envisage a solution, and 'remove' the problem;
- Practical deliberation; reflection which appraises to whole situation including moral and ethical issues;
- Speculative thought or critical reflection; is concerned with thought itself, of how the forms and contents of our thought shape and are shaped by the historical situations in which we find ourselves.

Kemmis argued very strongly that reflection could only be understood in reference to action or context from which it derives its meaning and significance. He emphasised that the nature of reflection, among other things, is not value-free or value-neutral, and that it is not indifferent or passive about the social order. For Kemmis reflection is: "... a practice which expresses our power to reconstitute social life by the way we participate in communication, decision making and social action" (p. 149).

DEFINING THE CONCEPT OF REFLECTIVE THINKING

No single definition exists as to what constitutes reflective thinking although a number of common themes could be identified. The literature asserted that reflective thinking most often referred to as 'reflection' (noun), comes to the fore in uncertain or unfamiliar situations that are considered 'problematic'. Reflecting on these situations serves to make sense of the event by examining the parts, the possible connections between these parts, as well as the links between this situation and previous experiences. Reflecting on experiences or phenomena is a deliberate cognitive activity in which the individual links together a number of objective and subjective observations, which may or may not be inter-connected, to construct a 'reality' that gives personal meaning to a particular situation, and ultimately influences all related behaviours and actions. It is assumed that the fruits of this mental activity result in an increased knowledge level. Applied to nursing, reflective thinking will contribute to improved nursing practice.

In non-routine situations there are no 'easy answers' but only 'what ifs', and in order to understand, or make sense of these disjunctions, the literature maintained that the practitioner engaged in reflective thinking. Jarvis (1987) suggested that nurses, when confronted with a disjunction in the clinical setting, question the 'taken for granted' view. His concept of a 'disjunction' is comparative to Dewey's (1933) notion of being confronted by a situation of doubt, confusion, or perplexity. The awareness of such a disjunction produces uneasiness, or a feeling of inner discomfort, as the practitioner realises that the situation is no longer 'routine'. The importance of one's awareness of feelings in such situations has been emphasised by Boud et al. (1985). The focus of reflective thinking is largely on 'self-in-context', as the individual nurse brings to every situation his/her own perception of the phenomenon/event, and becomes through his/her involvement in the event, an intrinsic part of the context. Focusing on self requires an awareness of one's 'place' within the event, and to be in touch with one's feelings, thoughts, and actions, as they relate to the actual nursing situation. These situations become a challenge, not only because of the 'newness' or uniqueness, but because the outcome of non-routine situations are not easily predictable. Schutz (1970, p. 134) noted that: "Men stop and think only when the sequence of doing is interrupted, and the disjunction in the form of a problem forces them to stop and

rehearse alternative ways - over, around or through - which their past experience in collision with this problem suggest." The practitioner is required 'to think on his/her feet', assess the situation, generate potential solutions, examine and compare these solutions and select the most appropriate one (Schön, 1983). In line with the common themes found in the literature the researcher formulated the following operational definition of reflective thinking:

Reflective thinking is a highly adaptive and individualised cognitive activity in which the individual deliberately and purposely engages in discourse-with-self in an attempt to critically, yet creatively analyse, and make sense of past and current experiences or phenomena leading to a changed, or new, perspective which influences future behaviour.

SUMMARY

Dewey (1933), one of the first educational theorists to discuss the concept of reflective thinking, maintained that the function of reflective thinking was to transform situations of doubt and perplexity into situations that were clear, coherent and understood. Dewey believed reflective thought patterns differentiated from 'other' thoughts in that reflective thinking was focused, controlled, critical, and ordered in a consecutive way. Schön (1983), in contrast to Dewey, narrowed the concept of reflection considerably when he defined it as an epistemology of professional practice. Schön's writing have had a tremendous influence on nursing education even though nursing experiences take place in the 'real' world (in *practice*), and are very different from the virtual world (*practicum*) as discussed by Schön. Furthermore, the literature review uncovered some philosophical shifts in regards to the general concept of reflective thinking and more specifically in regards to the concept of critical.

While Dewey saw reflective thinking as always being critical and a way to transform blind and impulsive actions into 'intelligent' actions, others (such as Freire, 1974; Kemmis, 1985; Van Manen, 1977) described critical reflective thinking as a way to challenge entrenched positions and taken for granted views in order to transform inequalities and reconstruct society. The lack of consensus among authors regarding a definition of reflective thinking, together with the changing meaning of the concept of critical has led to confusion and a wide range of unsubstantiated claims within the

nursing literature. Despite these differences, a number of common themes could be identified that appeared central to what reflective thinking is all about. The putting together of these common themes resulted in an operational definition of reflective thinking for the purpose of this study.

CHAPTER THREE

RESEARCH METHODOLOGY AND METHOD

INTRODUCTION

As very little is known about reflective thinking in nursing practice, a qualitative research approach is not only an appropriate, but an essential first step in uncovering how qualified nurses make use of reflective thinking, and what the focus is when they reflect in/on their practice. Qualitative studies tend to be exploratory, focusing on some phenomena without attempting to control the context in which these phenomena take place. Qualitative research is hypothesis generating rather than hypothesis testing and can offer a fresh perspective on an area that has or has not previously been investigated. Dickoff and James (1968), propose a schema of four levels of theory (factor-isolating, factor-relating, situation-relating, and situation-producing theories). They stress that lack of attention to the beginning levels of theory development (factor-isolating and factor-relating) will be detrimental to the development of nursing theory. A qualitative research method will attend to the factor-isolating and factor-relating levels of reflective nursing practice which are the beginning steps of theory development as it attempts to answer questions such as; What is reflective thinking in the nursing context? How do nurses think reflectively? What is the focus of reflective thinking in clinical practice? How does reflective thinking contribute to clinical practice?

Studying reflective thinking in qualified nurses requires the researcher to centre on the nurse-in-context. Such research should focus on how nurses perceive and interpret an experience or phenomenon. It should take into account the nurses' feelings and emotions resulting from the experience at the time, and explore how the nurses saw their own unique situation. Did they have any questions in regards to what was happening, and if so, what helped them to find the answers to resolve the situation. The research also needs to include the conclusions the nurses arrived at as a result of reflective thinking, and incorporate how the outcome connected to, or influenced their nursing practice. Professional nursing actions should not be 'hit and miss' attempts,

rather they are deliberate and intentional and are the manifestation of the subjective meanings given to the experience/phenomenon by the nurse. The research method selected, to explore and examine the characteristics of reflective thinking, needs to be able to capture the interpretive nature of this type of thinking from the reflecting nurses' point of view.

THE SENSE-MAKING METHOD

The Sense-Making method has been in development for over 22 years and is foremost a coherent set of concepts to study how people create sense of their worlds, how they construct information and how this information is used in the process of making sense. The approach has been developed by Brenda Dervin and her colleagues and has been widely applied in social work, psychology, education and health communication. As of July 1995 some 600 citations can be found in the Social Science Citation Index. As the Sense-Making method has not been used for research purposes in New Zealand before, the theoretical base for this approach, the metatheoretical assumptions and propositions about the nature of information, the nature of human use of that information, and the nature of human communication, are explained in more detail in the following section.

Philosophical Underpinnings of the Sense-Making Approach

Dervin (1983, p. 3) defines human 'sense-making' as: "... behaviour, both internal (i.e. cognitive) and external (i.e. procedural) which allows the individual to construct and design his/her movement through time-space." The Sense-Making method is thus an approach to study the 'constructings'² that humans create to make sense of their experiences. The Sense-Making approach calls for a methodological refocusing from states and entities to processes and dynamics in an attempt to understand the nature of participatory communication (Dervin & Huesca, in press). The approach is qualitative/interpretive; it builds on open-ended questions and it encourages respondents to define and anchor themselves in their own realities (Dervin, 1989). To

² Sense-Making deliberately turns nouns into verbs, to remind the researcher/reader that making sense is always in progress and that it is the active involvement of the actor-in-the-world that creates personal sense.

ensure a clear distinction between Sense-Making as a method, and sense-making as a verb or phenomenon, the former is always indicated in capital letters.

Sense-Making starts off with assumptions that are commonly ascribed to phenomenology; the actor is inherently involved in his/her observations and it is from his/her perspectives and horizons that observations must be understood. However where it differs from some forms of phenomenological approach is that Sense-Making not only accepts ontological incompleteness, but also acknowledges and attends to ontological assumptions rather than bracketing these, or setting them aside. Sense-Making accepts the existence of gaps (also called discontinuities) between times, spaces, objects, and persons because all these entities are not connected in reality and are constantly evolving. It is assumed that discontinuity exists intrapersonally at the sensory level between reality and what the person perceives to be their reality, between what the person thinks and what he/she communicates, between the person at time one and time two. Discontinuity also exists at an interpersonal level, between humans across time and space, between humans and culture, between humans and institutions and so on.

Sense-Making assumes that reality is neither complete nor constant but potentially discontinuous and dependent on time and space. Sense-Making focuses on how individuals use the observations of others as well as their own to construct their pictures of reality and use these pictures to guide behaviour. While humans might create a certain order in their lives, Sense-Making maintains that this cannot be seen as a given. Rather, it assumes that there is no real order out there, or that at least there are no tools that can be used by humans to enable them to get a more comprehensive and a more stable picture of that reality. Sense-Making assumes that there are no external standards available for humans to assess their absolute or even relative truth. What is available is a whole range of human-made standards, such as accuracy, expedience, or familiarity through stereotyping, which are constructed and created in social interactions.

Sense-Making proposes that information is conceptualised as: "... that sense created at a specific moment in time-space by one or more humans" (Dervin, 1992, p. 63). Information is a product of direct and indirect human observation, and does not exist independent of, and external to, human beings. Delia (1977) suggested that there is

always a process of definition, standing between external events and the internal understandings of the person, which guides their behaviour. The end product of this defining process is the creation of personal 'meaning'. Meaning, according to Delia, is rooted in the individual's response to an event and not in the event itself. Information is seen as something that is always linked to human behavioural activities. Therefore, any study that examines how people process information should include not only an exploration as to how people make and use their 'constructings', but also how the processed information effects their actions.

Sense-Making assumes that humans move cognitively from place to place by means of 'constructings' which bridge the gaps of existence from self to others, to situations, and to events across time and space. 'Constructings' may be repetitions of past constructings, or they may be new inventions. 'Constructings' may appear rigid and repetitive, or responsive to changing conditions. What ever they are, 'constructings' are mandated in every context to bridge the gap. It is suggested that focusing on the gap, enables research at a more abstract, more fundamental, and more powerful level towards a new kind of generalizability across situations, while at the same time being more pertinent and more relevant to specific moments in time and space.

Focus of Sense-Making

The following model is derived from the conceptual premises outlined above:

<h2 style="margin: 0;">SITUATIONS -- GAPS -- USES</h2>
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SITUATIONS: Refers to the time-space context and are included because making sense is always situational.

GAPS: Refers to the situational discontinuities that require bridging. Gaps are included because they are assumed to be what sense making is all about.

USES: Refers to how the individual puts newly created sense to use.

In line with other interpretive approaches to research, Sense-Making assumes that any human use of information should be studied from the perspective of the information user and not from the perspective of the researcher. The questions asked should tell us

something about the participants, and illuminate what is real to them, and how they make sense of, and manage their world. There is an assumption that studying the steps that people take to make sense of, and act in, their world at a particular point in time, will give us insight about human use of information.

The Sense-Making approach thus attempts to develop an understanding of the processes, and behavioural strategies and tactics that individuals use to bridge discontinuities, or gaps, which prevent them from moving on. External conditions such as economic constraints, and institutional requirements and needs, are illustrative of the kind of structural restraints that effect individuals and may limit the creation of new responses. In regards to these external conditions, Sense-Making expects to find constancies across time-space in human behaviour as the individual defines their own relationship to these structures which are energised, created, changed, maintained, and confirmed by individual acts of communication. Therefore, external conditions and individuals are not seen as opposing or dichotomous entities, but are viewed dialectically, as an interdependent part of a whole. Sense-Making assumes that, by focusing on process, one can illuminate both process as well as static conditions, both flexibilities as well as rigidities, both hegemonic constraints as well as unbounded freedoms.

Sense-Making's Connections with Critical Theory

Ideologically, the Sense-Making method has strong connections with critical theory, and in particular with the works of Habermas, Hall, and Giddens. Sense-Making attempts, like critical theory, to understand how current systems constrain communication in order to examine how individuals construct sense both inside as well as outside of these structural constraints. Critical theory, according to Fay (1987), assumes that humans are active creatures that broadly create themselves on the basis of their own self-interpretations. Human interpretation and knowing is always connected and situated in a historicized context of people, settings, activities, events and power relationships. Likewise, while Sense-Making focuses on the individual, it does not rest on an individualistic theory of human action. Sense-Making assumes that structures such as community, culture, social organisation which are created, maintained, challenged, reified, changed, resisted, or even destroyed in human communication, influence the actions of the individual.

As mentioned earlier, the Sense-Making approach studies how people create sense, or make meaning, in order to understand the world in which they live. Sense-Making stresses the importance of communication within that process, demonstrating similarities to the theories of Habermas (1972), especially as it relates to the 'practical interest'. Habermas maintained that the generation of knowledge is based upon free, uncoerced, and undistorted communication. He identified three areas of cognitive knowledge based on human interests or orientations, the technical, the practical, and the emancipatory. The technical interest is associated with the empirical analytical science. The practical interest relates to the process of interaction or communicative action. Habermas maintained that language sustains the structures of power relationships and ideologies. Understanding of 'meaning' is at the centre of practical interest and it is at this point that the connections with Sense-Making are strongest. The third interest is the emancipatory orientation that is at the heart of critical social theory. The emancipatory interest exposes the structures of power relationships and ideologies with the aim to free people from these constraints. Emancipatory interest aims to develop self-knowledge through reflection, by examining traditions, rules, and habits, and to disclose reality from its own standpoint. While Sense-Making does not openly 'offer' research participants tools to overcome their oppression by raising their consciousness of power relationships and oppression around them, it assumes that: "...any individual who is listened to on her own terms emerges from the interaction more conscious of her world and, thus, better able to act upon it" (Rutledge-Shields & Dervin, 1993, p. 76). Thus, like critical theory, the Sense-Making approach can have a 'conscientising' effect as it assists nurses in analysing their personal, as well as their professional values, beliefs, and practices that are unchallenged and taken for granted in nursing practice.

The importance that Sense-Making attaches to communication for the creation of meaning, can also be found in the writings by Hall (1989), a proponent of critical social theory. Hall maintained that the production and transformation of meaning is part and parcel of organising how common sense and everyday 'knowledge' of the social world is structured. Communicative institutions such as language help constitute the social world in that the language used in a particular cultural setting dominates and determines the values, beliefs and practices in that setting.

Giddens (1989) suggested that the study of communication should be the focus, and central to the study, of social science as a whole. Giddens (1989) introduced the notion of 'monitoring', which is of special interest to this study because of possible parallels with reflective thinking. Giddens maintained that human agents routinely monitor what they are doing at two different levels of consciousness; discursive and practical. Discursive consciousness refers to the ability to put things into words while the practical consciousness consists of all the things that the agent knows tacitly without necessarily being able to give them discursive expression. As a consequence, people who are asked about why they acted in a certain way often provide reasons that seem inadequate to the observer. Giddens stressed that many of the events and processes in social life are not intentional, and that a proper appreciation of the significance of the unintended consequences of action is required. He argued for the need to recover the 'knowledgeable human agent'. This knowledge is not dependent on, but underlies human actions.

Sense-Making's other Connections

Beside its affinity to critical social theory, Sense-Making also draws heavily on the study of human cognitive processes, particularly Piaget (1962), and Bruner (1974).

According to Piaget (1962), intellectual growth hinges on two important principles of cognition, the ability to order and classify new experiences in the mind (organisation), and the ability to create meaningful understanding through the process of adaptation. The concept of constructings, as used in Sense-Making, relates closely to Piaget's cognitive principles.

Bruner (1974) viewed a person as an information processor, thinker, and creator, and his view emphasised both the rationality and the dignity of which human beings are capable. Bruner was especially interested in human concept formation and his work contributed to the understanding of the nature of ordinary awareness. Bruner found that people did not make random guesses in order to acquire concepts, rather they develop 'stereotypes' in order to categorise their perceptions. Such a categorising system improves the person's ability to anticipate reality and reinforces expectations about how things are supposed to be. As a result of this tendency to stereotype, human

agents construct a model of the world based on their system of categories. Thus humans seek to impose upon the situation certain expectations, which they bring to it so that perception is always selective and subjective, rather than purely based on occurrences in the real world.

The Sense-Making method focuses on developing understandings of dynamic process conditions and has been used to study: "... human sense-making in situations where humans reached out for something they called information, used something they saw as a potential source and judged whether it helped or not, or created an idea about an institution based on experience with the institution" (Dervin, 1992, p. 68). Sense-Making is seen as an applied research method that is suitable to study all situations that involve communication and sets out explicitly to develop theoretical understandings useful to practice.

Linking Sense-Making with Reflective Thinking

Nursing is an applied science with a unique body of knowledge and skills to serve clients in a wide variety of settings. Nursing is concerned with the well-being of individuals and groups and, depending on the theoretical model used, the nurse is said to assist, restore, maintain, enhance, or promote optimal health by meeting human needs, maintaining system integrity, or adaptation by diminishing or eliminating stressors (Jopp, 1989). No matter how nursing is defined, nursing is, and remains, a social act insofar that nurses interact and communicate with human beings and in the process of doing so, nurses give meaning to complex human behaviours and experiences.

Bruner (1974) argued that people, and thus nurses, develop stereotypes in order to categorise their perceptions of the real world. Using Bruner's theory it can be argued, that whenever the experience or perception fits an existing category easily, that experience can be considered a 'routine'. However, if it does not fit into the personalised category system, if there is so to speak a 'disjuncture', than such an event can not be labelled 'routine'. The situation doesn't seem 'to make any sense' when existing category systems are applied. Confusion and uneasiness is the result as the person attempts to comprehend what is going on. The awareness of a disjunction, or what Sense-Making labels 'a gap', combined with varying degrees of inner discomfort,

are the preconditions for a mental activity that was described by Dewey (1933), as reflective thinking. Indeed he argued that reflective thinking is a deliberate cognitive activity, triggered off by perplexity, a state of doubt or hesitation in an attempt to understand and/or develop new meaning from the situation/event.

Eysenck (1984) maintained that meaning is acquired, either incidentally and relatively unconsciously through mundane experiences, or deliberately and consciously through teaching and/or reading. The literature on reflective thinking indicates however that there is another way in which meaning is acquired. According to this literature, meaning is created from experiences through a deliberate and conscious process of reflective thinking (Dewey, 1933). As Boud et al. (1985) argued, reflective thinking is not idle meandering or daydreaming, but a purposeful intellectual activity aimed at working through the uncertainty, instability, and uniqueness of the situation.

So what do individuals do when they become aware that their perceptions no longer fit the 'reality' out there? When the road ahead is no longer visible, blocked, or leads to a junction, and choices need to be made. The assumption, made by Sense-Making, that humans engage in self-questioning, because they need answers in order to continue their journey, appears to fit rather well with reflective thinking processes as described in the literature. For example Dewey (1933, p. 14-15) maintained that language was an important tool for reflective thinking, and he argued that:

Where there is no question of a problem to be solved or a difficulty to be surmounted, the course of suggestions flows on at random. But a question to be answered, an ambiguity to be resolved, sets up an end and holds the current of ideas to a definite channel. The nature of the problem fixes the end of thought, and the end controls the process of thinking.

Freire (1974) emphasised the importance of asking poignant questions in order to analyse 'social causation'. This same need for questioning comes to the fore in many articles related to the use of journaling as a tool for reflective thinking. These articles suggested that raising pertinent questions in regards to professional, contextual, as well as wider socio-economic- and cultural issues related to nursing, was an important component to encourage reflective thinking.

Van Manen (1990) maintained that language plays a pivotal role in all aspects of reflection. Reflective thinking is a cognitive process that involves a dialogue with self in an attempt to define and clarify the experiences/phenomena encountered. It is suggested that reflective practitioners, in order to make sense of experiences or phenomena, think about, and assess the 'unfolding' situation during or after the event. Inner confusion stimulates discourse-with-self, or 'conversation-with-self', in an attempt to create some 'logical order'. Discourse-with-self gives rise to 'silent' questions concerning 'the event out there' and the self in relation to the event: What is going on here? Why is this happening to me? and so on. Van Manen (1990) asserted that lived experience is soaked in language, and that recall of, and reflection on, experiences is only possible because humans have a language. Indeed, no matter whether we think about our next meal, our current work situation, or our last holidays, it is impossible to engage in thinking and remembering without the use of our language. The centrality and importance of the role of language for human thinking is emphasised too by the post-modernist and deconstructionist approaches to human science.

The ability to ask questions of meaning and to construct systems of meaning appears fundamental to humanity (Piaget, 1929). Whenever an experience causes a disjunction, or tension, between existing meaning and the new observation, people will pose questions. Whatever questions are asked, in some way they attempt to connect together a whole range of observations, verbal and non-verbal communications, current and previous experiences, feelings and intuitions, in order to create personal meaning.

The Sense-Making approach, according to Dervin (in press), is based on reflection being an inherent potential in human situation-facing and indeed, there are considerable similarities with the concepts usually associated with reflective thinking. For example, Schön (1983) suggested that professional practitioners, through the process of reflection-in and on-action, gain knowledge and understanding from past and present experiences. It is a highly individual process by which the practitioner modifies and develops his/her ideas and understandings through rational thinking and problem-posing. Sense-Making, along similar lines, suggests that people, in order to make sense of new situations, built new 'constructings' or rebuilt/altered previous

'constructings' based on contextual understandings and past experiences. Sense-Making assumes that human 'constructings' are highly individual, and bridge the gaps of existence between self and environment, and as such help the person to make sense of, and move on in their journey. Schön also discussed the uncertainty, disorder, and indeterminacy associated with the day to day situation in the practice setting, and he referred to this as the 'swamplands of practice'. Similarly, Sense-Making maintains that 'reality' is neither complete nor constant, but rather filled with fundamental and pervasive discontinuities. Such a 'reality' resembles very much the 'swampland' situation as described by Schön.

Past experiences are considered an important 'ingredient' for reflective thinking. For example Freire (1970) referred to the need to be aware of the sociohistorical reality that shapes peoples' lives, while Mezirow (1981), stressed the importance of one's personal history and the need to relive it as part of the reflective process. Boyd and Fales (1983) viewed the establishment of continuity of self with past, present, and future, as one of the essential components of the reflective process, and the importance of past experiences is reflected in these authors' definition of reflection as well. Sense-Making too, emphasises the links between the person's sociohistorical experiences and the way this person is going to make sense of current or future events. This 'making sense' process refers to direct observations of reality as well as the interpretation of observations (information) made by others. Reflective thinking, as described in the literature, serves a similar purpose, which is to analyse and make sense of an event, but its application appears to be far narrower. Most of the contemporary literature tends to restrict and limit the scope of reflective thinking to professional issues, and the person's own (direct) experiences only. However, the way humans make sense of their environment is much wider in its approach, and includes the use of direct and indirect observations. Sense-Making, as a research method, is specifically designed to explore how people seek and make use of information in an attempt to make sense of a situation.

USING THE SENSE-MAKING METHOD TO STUDY THE CONCEPT OF REFLECTIVE THINKING

The Sense-Making method is highly appropriate to examine the concept of reflective thinking because of its qualitative nature and unique way of interviewing participants. As mentioned before, Sense-Making assumes that gaps exist both at an intrapersonal and at an interpersonal level. Applied to the nursing context, gaps exist between reality and what the nurse perceives to be his/her reality, between assessment and interpretation of assessment findings and between intentions and actions. Gaps also exist at an interpersonal level, between the nurse and the client, between the nurse and other members of the health care team, between the nurse and a whole range of cultures, including the institutional culture. Conditions such as the context in which nursing takes place, the economic constraints placed on nursing care, the medical dominance of the health system, and the institutional requirements and needs, are illustrative of the kind of structural restraints that contribute to discontinuity and require nurses to create new responses, to build constructings to bridge perceived gaps.

The Sense-Making approach enables the researcher to study how nurses perceive specific events within their practice, and how nurses build constructings to make sense of their past and current practices, in order to bridge the discontinuities that are an inherent part of nursing practice. Reflective thinking is, like sense making, a continuous process. It can be conceptualised as a spiral, building and expanding on past and current experiences for the benefit of, and contributing to, future practice. Because the focus of Sense-Making is on dynamic processes, rather than static conditions, it is argued here that the method is ideally suited to examine reflective thinking in nursing practice. Many authors, when describing the goals of reflective thinking refer literally to the need to make 'sense' or create meaning/understanding (Clarke, James & Kelly, 1996; Conway, 1994; Dewey, 1933; Fernandez, 1997; Jarvis, 1987 & 1992; Johns, 1995; Palmer et al, 1994; Schön, 1992).

The literature on reflective thinking indicates a widely held acceptance that reflection commences with a description of the 'whole' experience (Johns, 1995). Following on from this general description, key issues within the experience are identified and

focused on for reflection. Thus, there is a dynamic cognitive movement from the whole to the particular, to the parts, and subsequent movements between the parts and the whole, resulting in varying degrees of unfolding links and understandings of this experience in the light of previous perceptions and experiences. Any research method used to examine reflective thinking ought to incorporate these dynamic cognitive movements.

RESEARCH PROCEDURES

As noted earlier, the Sense-Making method focuses on three classes of measures: SITUATIONS-GAPS-USES. The point of convergence in each of these classes is to identify dimensions of sense making that were useful and valid and as content-free as possible. The latter requirement does not deny or ignore the importance of content, but rather emphasises that the focus is on the cognitive activities employed by the participants. Questions were thus in essence neutral and content free. This allowed participants to remain 'free' to fill-in their representations of, and/or thoughts about the situation, express their views, and focus on those elements of their experiences that they perceived as important (Dervin & Dewdney, 1986).

Interview Technique

From a variety of interview techniques developed for Sense-Making, the present study used the 'Micro-Moment Time-Line Interview' (MMTLI). The MMTLI was specifically developed to enable the 'capture' of dynamic cognitive movements in regards to an experience/situation. The Sense-Making approach rejects the perception that any experience/situation can be seen as 'a single entity'. Rather, Sense-Making assumes that every experience/situation is made up of a whole range of interrelated and interconnected 'micro' experiences/situations called 'steps'. Each micro experience is the result of the outcome of the previous step while influencing in turn the next step. This notion of interrelated micro-moments is strikingly similar with the 'steps' in reflective thinking as discussed by Dewey (1933).

Kemmis (1985, p. 150) stated that reflection can not be studied from the 'outside', and he argued that:

Crucial aspects of reflection are only accessible from the 'inside' of the actor and the act: the attitudes, beliefs, ideas, motivations, values, interests and commitments of the actor, and the processes of judgement by which she or he makes a personal 'reading' of the meaning and significance of the situation and possible actions in it.

It is argued in this study that MMTL interviews enable the researcher to get 'inside', or at least close to, the reflective activities within the context of the situation. MMTL interviews are thus a 'step by step' approach, which focuses on how individuals made sense of the parts that made up the whole experience. The researcher's goal was to explore the participants' reflections at each successive step of the experience by analysing the questions participants were asking themselves about the situation while being engaged in discourse-with-self. Furthermore, participants will also be asked to reflect on the whole experience because the 'whole' experience is larger than the sum total of the parts, thus enriching the data.

Although each application of the MMTLI involves its own adjustments to suit the particular research context, all have in common an attempt to secure from the respondent a description of at least two dimensions of the three-part 'situation-gaps-uses' model in such a way that the data for each dimension is tied to a specific situational moment in time and space.

The technique involves asking the participant to detail what happened in a particular self-selected situation step-by-step to place it firmly in context. For each step (called a Time-Line step), the participant is asked what questions arose as a result of the given situation, what needed to be learnt, and how the participant understood or made sense of the situation, and how self-questioning clarified the unique situation in order to bridge the gap between the theoretical knowing and the practical doing.

Focus of Interviews

Although the interview style was open and informal, it was not entirely non-directive and unstructured. All participants were informed of the focus of the study and were aware of the type of questions to be asked. As can be expected, when interviewing registered nurses regarding self-selected situations related to their nursing practice, the experiences described were highly unique in every aspect. The situations were unique,

not only in terms of the events experienced, but also in regards to the intensity and impact of the event on the nurse, the number of people and personalities involved, as well as the physical, social, and political contexts that surrounded the described situations. Analysing the content of the descriptions, while very interesting for gaining an insight in nursing, would not lead to any in-depth understanding of reflective thinking. Such content analysis would certainly not shed any light on how these particular practitioners made sense of their perceptions of the situations they were faced with. It is important to reiterate at this point that Sense-Making does not place interpersonal and contextual conditions in opposing or dichotomous 'frames', but rather they are viewed holistically as an interdependent part of a whole.

After the first interview the transcripts were analysed and condensed to ensure a clear focus on situations-gaps-and uses. Prior to the second interview all participants read the condensed version and were asked to comment on the correctness of the interpretations so far. Although the transcripts of the interviews were condensed, the researcher ensured that the content still contained large chunks of verbatim texts to provide participants with opportunities for more critical self-reflection (Stevens, 1989).

Interview Questions

Each interview began with the participant sharing the 'whole' experience or event. From this description both the participant and the researcher mutually identified 'natural' steps or stages. Subsequently questions were asked in relation to each step or stage regarding the 'SITUATION', the 'GAPS', and the 'USES'.

During the second interview four more questions were asked to obtain a better understanding of reflective practice. These questions are indicated below in *italics*.

The analysis of 'SITUATIONS' was concerned with the identification of the different ways in which participants saw their situation, or more precisely, the analysis centred on the variety of ways in which participants perceived their movement through time/space. The following questions focused on 'situations':

- *What impact did the experience have on you?*

- What emotions or feelings did you have? What led to them?
- What in the situation 'challenged' you?
- *How did you perceive your situation?*

'GAPS' have been defined as the questions participants constructed when confronted with a situation that blocked movement through time and space. The following questions were used to identify 'gaps':

- How did this event relate to previous experiences?
- What questions or confusions did you have?
- What aspects in the situation prevented you from getting answers?
- What would have helped you, and how would it have helped you?

'USES' refers to how the information, gained from self-questioning, helped (or blocked) the participants' movements through, and contributed to new or better understanding of, the situation. It was assumed that examining and coding the nature of these questions would provide insight into reflective thinking. The following questions were developed to analyse 'uses':

- What conclusions did you come to as a result of the experience? What have you learnt?
- How did the outcome of this experience connect to, or influence your nursing practice?
- How did the outcome of this experience connect to, or influence you as a person?
- *How important were the questions you were asking yourself?*
- *How, or in what way did these questions help you? Or*
- *How did these questions help you to make decisions?*
- *What have you learnt from the situation/event you described since our last interview?*

Analysis of Interviews

Because this study is concerned with exploring reflective thinking, the study does not focus on the descriptive content of the event, but rather on identifying what it is that nurses reflect on in their clinical practice. The descriptive content of the event, important as it may be for the participant, is 'used' as a 'vehicle' to expose reflective thinking. Reflective thinking is a cognitive activity in which the individual deliberately and purposely engages in discourse with self in an attempt to critically, yet creatively analyse, and make sense of past and current experiences or phenomena. As it is argued in this study that self-questioning is an integral component of the reflective thinking process, encouraging participants to focus on these questions, and the possible confusions that resulted from their experience, may produce common variables that are representative, or characteristic of reflective thinking.

The three aims that structured the analysis were:

1. To identify how participants saw their situation by describing their emotions and feelings, and the ways in which they were challenged by the situation;
2. To describe the perceived gaps participants had to overcome to be able to 'keep on nursing';
3. To identify how information, gained from self-questioning, helped (or blocked) the participants to make sense of, or better understand the client, the situation, and/or themselves.

It is important at this point to acknowledge that these aims require some sort of 'structure' to guide the project. However, structure does not imply that the project was constrained by these guiding aims. Thus, the questions used were adjusted to 'fit' the situation and participants were encouraged to tell their own 'story', using their own words, feelings and perceptions.

It is expected that analysis of these questions will produce a tension that is inherent in contextualised 'interpreting' of wholistic phenomena. Sense-Making assumes that any interpretations are necessarily bound by the present and past time-space of the researcher. It is further assumed that most of the traditionally accepted methods of content analysis are suitable to interpretive analysis. What is required however, is a:

"... systematic setting down for the record of the step-taking the researcher did, cognitively as well as physically, in coming to, journeying through, and completing the research project" (Dervin, 1991, p. 3).

The interpretation of text focused on the mutually agreed upon micro-moments of each transcript by the researcher. During the second interview, these interpretive accounts were shared with the participant. The focus was on portions of text that addressed specific questions first, followed by examination of the text as a whole for understanding the complete contextual situation.

The researcher is mandated, by the Sense-Making method to attend to what is called the Sense-Making triangle: how does the participant see/describe the situation, what gaps does the participant see self as facing and/or bridging, and in what ways did the participant see self as helped by the constructings he or she built to create meaning about the situation.

Participant Selection and Settings

Participants needed to be qualified practising nurses, preferably with a minimum of two years experience and needed to be able to discuss nursing experiences in the English language. The age range of the ten participants ranged from mid 20s to mid 50s, while their years of nursing experience ranged from 2 years to more than 30 years. Most participants had worked in a variety of clinical areas within the institutional setting. For one participant the current clinical area was the first following a long period as a 'casual pool nurse', while for another participant it was the second clinical placement since registration. One participant had extensive experience in district nursing.

The participants were drawn from three New Zealand hospitals. Permission to invite volunteers to take part in this study was sought from the managers of the institutions involved. Charge Nurses/Clinical Nurse Leaders were individually approached and informed about the study prior to displaying posters asking for volunteers on notice boards within the institutions.

Participants were recruited from the pool of registered nurses working full time or part time rostered shifts in a variety of medical and surgical ward settings. 'Snowballing' did occur on a number of occasions and was considered an acceptable method of recruitment.

Participants responded to the posters by contacting the researcher and were given additional verbal information regarding the intended study. A formal information sheet was sent if the inquirer indicated an interest in participating. Following this, all potential participants were contacted by phone a few days later to arrange an extended informal pre-interview meeting with the researcher.

The aim of this first meeting was to explain the purpose of the research, the nature of the research process, and the role of the participants in the study. Each potential participant was given the opportunity to ask questions and/or clarify any points made. At the end of the meeting written consent to participate in the study was sought. It was emphasised however that the participant could choose not to take part or withdraw from the study at any stage of the research process.

Participants' Involvement

This study aimed to clarify what reflective thinking is and explored, from the perspective of the practising nurse, how qualified nurses think reflectively, as well as what the focus of their reflective thinking is while in clinical practice. Participants in the study were asked to share one or more experiences/phenomena with the researcher and to focus on those processes that helped them to make sense of the situation and the type of learning that resulted from the experience. Thus, the focus of the interview was not on the situation or event itself, but rather on the cognitive processes and strategies employed by the participants in order to make sense of the situation or event.

All research participants were involved in a minimum of two and a maximum of three interviews. Interviews were conducted individually and each interview lasted between 55 to 80 minutes. All interviews were tape-recorded although the researcher did take some additional hand-written notes from time to time as and when required.

To ensure that the participants could tell their story uninterrupted, the researcher used two tape recorders. On the first tape the participant shared the event/situation with the researcher. After recalling their event, the participant and the researcher discussed and identified together the 'micro-events', or steps, within the event/situation. Keeping these steps in mind the tape containing the event was then replayed while the second recorder was activated. After completion of each identified step, the 'event' tape was temporarily stopped while the second tape continued running. The participant was then asked a range of questions related to the identified step. Once this step was explored, the event tape was reactivated and the process repeated. The advantage of using two tapes was two-fold:

- The participants didn't lose track of their initial story because there were no interruptions caused by asking questions,
- The participants had the opportunity to correct themselves if they had forgotten to mention something while telling their story on the first tape.

Use of Journals

Although none of the participants routinely kept a professional journal, it was suggested that participants might want to maintain such a journal for a short period of time to assist them in their recall of events/situations. It was assumed that using a journal would also assist participants in focusing their thought on the contextual situation surrounding the event. One participant required extra information regarding journaling and was supplied with literature concerning journal-writing skills. Even though participants were informed that the researcher had no right of access to these journals, or parts thereof, without their explicit permission, only one participant kept some notes for the purpose of this research. No journals were shown or given to the researcher.

ETHICAL CONSIDERATIONS

In order to provide the conditions in which ethical standards can be maintained the following procedures were undertaken:

Ethical Approval

The research proposal was presented to the Massey University Human Ethics Committee and permission was sought to conduct the study. Following approval, the proposal was forwarded to the Manawatu-Wanganui Ethics Committee. After obtaining their permission, the research proposal and accompanying letters from both Ethics Committees were sent to the 2 Crown Health Enterprises³ at which the study was to be undertaken. Written permission was sought from management to display notices on their premises to invite volunteers for the study. Once permission was received, the researcher also met individually with all the Charge Nurses/Clinical Nurse Leaders to explain the study in more detail and gain their approval and support.

The Rights of the Individual

To be true to the strong philosophical connections Sense-Making has with critical social theory, the researcher was obliged to respect and affirm the rights of the participants as autonomous and self-determining individuals during all the stages of the research process. The researcher ensured that all participants who took part in this research did so on an entirely voluntary basis.

The researcher ensured that written informed consent was obtained from all participants in the study, but only after participants were fully informed of, and understood the nature of, and their role within, the study. Any questions participants had regarding this research were answered to the participant's satisfaction, prior to asking participants to sign the consent form. Signing the consent form did not alter the participants' rights to withdraw from the research at any stage without adverse consequences. All participants had the right to retract statements, or to decide to not complete the interview if they so wished.

³ Crown Health Enterprises are business entities responsible for providing publicly funded health services within a certain geographical area.

The type of event/experience recalled was the participant's own choice, and participants were reminded of this prior to each interview. No pressure was applied on participants in any way to visit, or revisit, areas of nursing practice that participants wanted to avoid. In line with the philosophical underpinning of the Sense-making approach, participants were listened to on their own terms, and it is believed that the research process, as well as its focus, provided the conditions that encouraged critical self-reflection through which participants may have come to view their world differently.

Access to Participants

Access to the participants was solely for the purpose of interviewing or to clarify aspects of that interview at a later date. All interviews were arranged at a time and location suitable and convenient for the individual participants. One participant requested a second person to be present during the interview and this was accommodated. Interviews took place at either the participant's or the researcher's private home. No interviews were conducted on the premises of any of the three health care institutions involved, thus adhering to the terms and conditions negotiated with the health care institutions.

Anonymity and Confidentiality

The identity of all the participants taking part was safeguarded throughout this research. All references to participants in the taped interviews, the transcripts, the interim reports and the final reports/thesis, as well as labels used to mark tapes and computer disks, were done in code or by using a fictitious name, known only to the researcher. Interview times were arranged in such away that participants did not meet each other during 'cross-over time'. To ensure that anonymity was maintained the researcher retyped any hand-written information or field notes. The original documentation was destroyed or given back to the participants (if he/she so wished).

The transcriber was required to sign a confidentiality agreement. Once the information was safely stored by the researcher, the transcriber was notified to destroy all back-up copies.

Procedures for Handling and Storage of all Information.

The researcher ensured safe deposit of all information and material produced as a result of this research. Each participant's interview was recorded on a new tape to ensure no accidental mix-ups of participants. Used tapes were removed from the tape recorder for safekeeping. All tapes were labelled with a code known only to the researcher. The list of codes was separately stored from the consent forms, audiotapes, and transcripts.

SUMMARY

This chapter outlined the research methodology used to study reflective thinking in nursing practice. It was argued that a qualitative research approach allows for a broader understanding and deeper insight into complex human behaviour by including, rather than isolating, the contextual realities of the social world. As little is known about the nature of reflective thinking, a qualitative approach was considered essential in order to uncover how nurses reflect, the processes involved, as well as the focus of their reflective thinking in clinical practice.

The Sense-Making method was selected as an appropriate qualitative research approach for the current study. Sense-Making has strong ideological connections with the work of Habermas, Hall and Giddens, as well as with the theories developed by Dewey, Piaget, and Bruner. It has been argued that Sense-Making as a research method has close affinity with the principles usually ascribed to reflective thinking.

Finally, this chapter discussed the application of Sense-Making as a research method, including the procedures to select participants, the interview technique and the types of questions used. The ethical aspects of the study were given special consideration

CHAPTER FOUR

SITUATIONS: CHALLENGES, EMOTIONS AND FEELINGS

INTRODUCTION

This study is concerned with clarifying the concept of reflective thinking and exploring how qualified nurses think reflectively, as well as what the focus of their reflective thinking is while in clinical practice. The literature concerned with reflective thinking maintained that this type of thinking comes to the fore in those situations that are, or can be, described as 'problematic' or 'unusual'. For this reason participants in this study have been asked to share a nursing event, or situation, that they themselves considered as 'unusual', 'non-routine', or 'never experienced before'. It was emphasised to each participant, during the pre-interview meeting, that the event/experience did not have to be 'positive' or 'negative', 'big' or 'dramatic'. Participants were aware that the events selected by them would serve as a vehicle only, to explore their own reflective thinking. It was stressed that the researcher would at no time make any comments on the nursing situation, management of the situation, the participant's role in it, or the quality of care delivered. The latter was considered extremely important by the researcher and is in line with the Sense-Making philosophy because;

- All descriptions of events are the sum total of the participant's perceptions;
- All perceptions are time-space bound and always situational;
- All events should be examined from the perspective of the participant;
- Meaning does not exist independent of, or external to, the participant ;
- Participants should feel free and uncoerced when discussing any aspects of their experience.

Ten events or experiences form the basis of this study. The data was collected through 22 Micro-Moment Time-Line (MMTL) interviews. In the first taped interview participants retold their experience of a particular event without interruption. Often

the recall of the event lasted between 10 and 15 minutes. Following on from this, both participant and researcher would mutually identify, and agree on the different stages or steps within the one experience. Anything that happened within the event, that changed or influenced the participants' perception of the event, was considered a new step or Micro-Moment (MM). If for example new information came at hand, the client's condition changed, other people became involved, or the participant's feelings towards, or perception of, the event changed, it was mutually decided to label that as a new step within the event. The activity of identifying steps or MMs can be seen as the first analysis of the situation. Identification of MMs occurred in chronological order, hence the term MMTL interviews. Each step is the result of, and relates to, the previous step, which in turn influences the next step. Each step was explored in regards to how the participants perceived their situation, what impact the situation had on them, the associated feelings and emotions, and how, or in what way, participants gained an understanding of the situation.

It is assumed that participants, if given the time and encouragement, are able to accurately describe an event, including their feelings and thoughts. For this to occur however, participants need to feel safe, secure, and valued as individuals of worth. It is thus important to create an interview atmosphere that is relaxed, yet focused on the participants and on the stories they have to tell. Allowing participants to talk 'freely', without being interrupted by questions, results more likely in the 'full' story being told on the participants' terms, and reduces the risks of 'leading'.

EXEMPLAR

To set the scene, the interview with Ann is used as an exemplar to enable the reader to gain more in-depth knowledge of the chosen research method 'in action'. Following on from this, the remaining participants are introduced as well as a brief description of their events. Verbatim examples are used during the in-depth analysis to illustrate various aspects of reflective thinking.

To ensure anonymity and confidentiality certain information is, where possible, withheld or deliberately altered. However, the utmost care has been taken to ensure that the essence of the situation or event has been retained. In many cases, the author

has changed the gender of the participants' clients and/or the clinical area where the event took place.

'Ann'

Ann completed her undergraduate nursing programme at a technical institute two years ago and has been employed in a hospital setting since then. Ann worked on the 'casual pool' for some months before being appointed as a staff nurse in a busy general medical ward.

Ann cared for an 18-year-old client 'Chris', who was admitted to the ward with a skin complaint. Chris had developed skin lesions that would appear 'just out of the blue'. Although a number of tests were done following the admission, no diagnosis was established. Over the days that followed, Ann developed a good rapport with Chris, and she described her client as a 'cheery, happy-go-lucky' person.

On her return from two days leave, Ann noticed a difference in Chris' behaviour. He was not his usual self, and remained in bed for most of the duty. As it wasn't too busy in her ward at the time, Ann decided to sit with Chris to carefully probe what was going on, how he was feeling, and why he appeared to be withdrawn. It wasn't before long when Chris told Ann that he had all these strange thoughts in his head. Chris could hear voices telling him to jump out of the window to harm himself.

Ann made a verbal contract with Chris to ring the bell if he felt these voices were going to get any worse. Despite this arrangement, Ann did not trust the situation. She felt uneasy and nervous. She informed the mental health crisis team of her concerns and asked for their assistance. Although Ann went to tea, she cut it short to return earlier to the ward and her client. She sat with Chris who became increasingly agitated and rather aggressive and needed to be restrained at times. Chris was transferred to a side-room, and Ann rang again the crisis team to inform them of the worsening situation. During this time Chris also revealed to Ann that his skin lesions were self-inflicted.

It took a couple of hours, which Ann described as 'ages', before the crisis team arrived to assess the situation. Their assessment resulted in Chris being sectioned under the Mental Health Act, and transferred to an acute mental health facility.

Ann's Micro-Moment Time-Line Analysis

Ann needed to make sense of her experience in order to be able to practice effectively. Gaining an understanding of what is taking place, or required in a particular situation, doesn't happen all at once. Rather, such understanding develops as the situation unfolds. As Ann noted: "When this whole situation goes from step to step you sort of forget about them (the steps)." Thus, after recalling her 'total' experience, both Ann and the researcher mutually identified distinct steps, or MMs, within Ann's experience.

The following section is an example to illustrate how the MMs were selected. As can be seen the MMs were labelled in such a way as to reflect the participant's focus or perception at the time, and as such the MM labels attempt to describe that particular moment. The 'flow' of the event becomes evident if one reads all the steps, which are written in chronological order.

Ann: I don't have any 'real' experience with dermatological conditions. I have never seen a skin condition as presented by Chris. I didn't have knowledge of the skin condition the doctors were considering, and I can not recall the name of the condition. I don't understand the relationship between the skin condition and the observations I was asked to perform, I felt rather confused about the situation.

As can be seen, Ann's main focus at this stage was trying to make sense of Chris's skin condition. Subsequently the above described aspects were clustered as one identifiable step, or MM, within the overall situation and labelled:

1. Ann needed to make sense of the skin complaint that Chris had.

I noticed that Chris's behaviour had changed but I had no idea why this was happening. There was no mention of this in the oral 'hand-over' between the shifts, nor in the written report. I felt uncomfortable about the situation. I felt that it was important to find out why Chris was behaving differently in order to be able to help him, and I saw this as a major challenge.

The change of focus is very obvious. As Ann said, she noticed a change in Chris' behaviour that absorbed her attention and 'overshadowed' the previous uncertainties related to the skin condition. These distinct aspects were identified as another unique step in the situation and labelled as:

2. *Ann needed to know why Chris behaved differently from the previous days.*

I spent extra time with Chris because I wanted to find out what was going on. I was rather shocked when Chris expressed his suicidal thoughts, as I had never experienced this before. To be honest, I was confused as to whether the situation was true and real or nonsense. I wondered whether it was possible that Chris was having me on. The challenge for me was how to evaluate the safety of Chris and the environment. I also needed to come to terms with the fact that the skin lesions, according to Chris, were self-inflicted.

These distinct aspects were clustered as an identifiable step in the situation and labelled:

3. *The discovery by Ann that Chris heard voices in his head telling him to harm himself.*

I found myself in completely new territory. I needed to know whether this situation constituted a 'crisis'. I felt very unsure and I questioned my own knowledge in regards to mental health legislation, and my own skills in assessing a mentally unstable client.

Subsequently this step was labelled:

4. *Trying to make sense of what was happening*

I was challenged as to what step to take next. Do I need to inform the mental health crisis team or not. I decided to ask for assistance from the crisis team.

For Ann this was a major step because she wasn't at all sure that it was an absolutely right decision. The step was labelled:

5. *The decision by Ann to inform the mental health crisis team.*

While waiting for the crisis team to arrive, I assessed how the environment could be altered to ensure safety. I transferred Chris to a single room. Very soon I found myself restraining Chris. I wasn't totally sure whether I had the right to do this. I was worried that the situation could go out of control and concerned about the time it took before the crisis team arrived.

These distinct aspects were clustered as an identifiable step in the situation and labelled as:

6. *The need to restrain Chris in order to ensure his safety.*

Finally the mental health crisis team arrived. Chris was assessed by the team and transferred to a mental health facility. I felt exhausted and drained. I was in doubt and I still wonder whether I have done the right thing, but the crisis team said that I had acted appropriately.

These distinct aspects were subsequently clustered as an identifiable step in the situation:

7. *The arrival of the mental health team and the transfer of Chris to an acute mental health facility.*

Micro-Moment Time-Line questions

The above procedure was repeated for each participant, resulting in the identification of distinct steps, or micro-moments in chronological order within each experience. Once these steps were identified participants were asked to focus on step one, then step two and so on, and respond to the following questions:

- What impact did the experience have on you?
- What emotions or feelings were felt at the time and what led to them?
- What was 'challenging' in the situation?
- How did this event relate to previous experiences?
- Can you recall any questions or confusions arising at the time of the experience, and if so how important were they?

- Were there any aspects in the situation that prevented you from getting answers to the questions or confusions?
- Is there 'anything' that you can think of that would have helped 'if only', and if so, in what way would it have been helpful?
- How does the outcome of this experience connect to, or influence you either professionally and/or personally?

A second interview was organised for all participants. This would allow the researcher to check with the participants, and obtain feedback, regarding the correctness of the transcripts. Prior to the second interview all participants were given a condensed version of the first interview and asked to comment on the correctness of the transcript. In some cases minor changes were made to clarify the situation or enhance certain aspects of the event.

While a lot of information was gained from the first interview, it is only when one analyses the data that one realises that there are some aspects that have not been addressed sufficiently because the questions weren't focused enough. The first interview demonstrated that participants did ask themselves questions in the situation, but the reasons as to why, or to what effect those questions were asked, were not sufficiently explored at the time. During the second interview the researcher asked four additional questions to enable a more in-depth exploration of this phenomenon that appeared to be a recurring theme in the obtained data. In regards to each step within their situation, participants were asked:

- How did you perceive your situation?
- How important were the questions?
- How, or in what way did these questions help you?
- What have you learnt from the situation/event you described since our last interview?

Two participants had a third interview to further clarify specific statements made in the second interview.

INTRODUCTION OF PARTICIPANTS AND OVERVIEW OF EVENTS

Besides Ann, nine other registered nurses took part in this study. In the section below these participants are introduced as well as an abstract of the situation/event that they chose to share with the researcher.

Included in the abstract is a short exploration of what the participants perceived as a 'challenge' within the particular situation, and how they felt at the different stages during the event. How a person feels about a certain situation is likely to be influenced by previous experiences and his/her perceptions of the challenges arising from that particular situation in time. Feelings already present at that particular time, and brought into the situation, in turn, will influence how the person perceives the challenges, i.e. positive, negative, impossible and so on. It is thus important to include the person's feelings when exploring challenges. The events described below, are just 'a fraction' of the whole story as told by the participants. The abstracts are unable to reflect, or do justice to the real concerns, worries, grief, and anguish that was felt by many participants at the time, and that was brought back to life again when they shared their stories with the author.

'Betty'

Betty obtained her General and Obstetric Nurse registration in the early 1980s, and has worked ever since as a staff nurse in a variety of ward settings.

Betty described an event that occurred while she was acting charge nurse in the paediatric ward. It involved a little child (Robyn), who had been transferred from another hospital. Robyn had encephalitis and, although improving, was still rather sick. The family stayed with Robyn and was actively involved in the care. Because of the family's cultural background they made a number of requests, that they considered important for Robyn as well as for themselves, in order to function as a family. One of those requests was for tea-making facilities in the room. The ward has a very strict rule that does not allow for hot drinks to be in the ward, because of safety concerns. However, the ward also has a rule that the care provided should be negotiated and family centred. Betty's dilemma was how she was going to deal with this request, knowing that 'bending the rules' to accommodate the family would upset other nursing

staff and possibly other parents who were told that they were not allowed hot drinks because of the 'safety rules'.

A couple of days after the admission, Robyn's mother asked Betty whether she could do the observations. Knowing that the mother was a qualified nurse, and taking into account Robyn's condition, Betty agreed with the mother's request. A short time later some nursing staff argued that this decision resulted in unsafe practice, as nurses were less inclined to go in and get involved with Robyn's care. Again some staff expressed their concern about the bending of rules for this particular family.

In short, Betty's experience was very complex in that she had to focus on the wellness of Robyn and the family, the expectations of the staff in the ward, as well as the different cultural perspectives, including the nursing - and institutional culture.

After Betty had shared her experience both Betty and the researcher identified and named the following micro-moment time-lines:

1. *The request for a prayer prior to the admission of Robyn.*
2. *The request by Robyn's family to have tea making facilities in the room.*
3. *The objection by some of the ward staff regarding the bending of rules.*
4. *The mother's wish to do the observation on Robyn herself.*
5. *The comments by some staff members that Robyn's safety was jeopardised.*

The main challenges for Betty could be summarised as the need to ensure safety for her clients and the staff, making decisions that were acceptable to the family and could be justified to colleagues. Remaining professional and 'hiding' feelings of frustration in the face of challenges to your own professional judgements and decisions was another challenge.

The feelings Betty described during this event included feelings of being unsure about what actions to take and what decision to make. She felt apprehensive or alarmed when Robyn's safety was questioned because of the 'bending' of the rules. Betty shared feelings of frustration and annoyance because she realised that it was impossible to come up with one answer/solution that would please 'everyone'.

‘Clare’

Clare completed her comprehensive nursing programme in the early 1990s. Clare's main experience has been in the medical and surgical ward settings.

Clare's event related to a client ("Peter") who had a chronic heart condition and was admitted with very bad chest pains. The consultant (A) responsible for the medical care of Peter did his round and, on concluding his physical examination, told Peter that it was 'all in his mind'. The consultant told him that he should lose some weight as he was 'too fat', and that he could go home later that afternoon. Clare explained to Peter that he had the right to be seen by another doctor if he wanted a second opinion. The wish for a second opinion was discussed with consultant 'A' who adamantly disagreed and did not want to discuss the matter any further. Clare decided that she had no other option than to phone consultant 'B'. He came up to the unit and spoke with Clare and Peter. After the physical examination he agreed to take over the medical care for Peter. After a few days Peter was discharged home.

A short time later Peter was re-admitted with the same complaints. He told Clare that he did not want to be seen by consultant 'A', who had been so rude to him previously. As consultant 'B' was on holiday, Clare decided to talk to consultant 'A' prior to him commencing the ward round. She informed him of the fact that Peter did not want to be seen by him because of his poor bedside manners and the way he treated him previously. Consultant 'A' paid little notice to what Clare said, and stated that the client had come in under his care, and that he was going to see him. Clare mentioned that her client had the right to be seen by another doctor but consultant 'A' disagreed and went ahead. He examined Peter, who was quite upset about this, and discharged him the same day.

After Clare had shared her experience the following micro-moment time-lines were identified:

1. *The sudden and unexpected discharge of her client.*
2. *The refusal by the doctor to allow Peter a second opinion.*
3. *The decision by Clare to phone consultant 'B'.*
4. *The acceptance by consultant 'B' to treat Peter.*
5. *The readmission and discharge of Peter.*

The main challenges for Clare can be summarised as how to ensure that Peter got his second opinion when his own doctor appeared to be uncooperative, and how to get support for her actions and decisions. How to preserve her own integrity while making a stand, and ensuring that she was prepared for any 'eventualities', was another major challenge.

The feelings Clare described during this event included feeling confused and unsure about patients' rights. She felt 'taken back' by some of the responses of medical staff, and extremely annoyed if not angry about the attitude and mannerism of one particular doctor.

'Diana'

Diana qualified as a Comprehensive Nurse in the late 1980s and has worked in a variety of wards including orthopaedics, gerontology, paediatrics, and neo-natal.

Diana's story related to an occasion when it wasn't busy in her clinical area and she was sent to a surgical ward. She was given a list with four clients. One of her clients was a 75-year-old gentleman Arnold, who had undergone an anterior colon resection and repair of a hernia five days ago. He had a colostomy bag and his intra-venous cannula was still in situ. When Diana came back from lunch Arnold complained that he was feeling cold and that he had been having some rigours. He asked for another blanket, as his legs felt really cold. Diana took his temperature, which was 38.7°C, up from 37.4°C earlier that morning. The wound had been checked that morning during the doctor's round and appeared to be healing nicely. Her immediate thoughts were that her client must have some sort of infection. She rang the house surgeon and informed him of her client's condition. The house surgeon came and took some blood samples and a mid stream urinalysis (MSU). The urinalysis showed small to moderate leucocytes and his urine was quite cloudy. The doctor diagnosed urinary tract infection (UTI) and commenced Arnold on antibiotics.

After Diana had shared her experience the following micro-moment time-lines were identified:

1. *Diana is asked to work in another ward.*
2. *Diana's client complained of feeling cold and generally unwell.*
3. *Coming across an unfamiliar surgical procedure.*
4. *Diana decided to inform the house surgeon regarding her client's condition.*
5. *The doctor diagnoses a urinary track infection.*

The main challenges for Diana can be summarised as having to cope in an environment that is not her usual place of work. Nursing and caring for clients while you feel that you do not know enough about their condition or the type of treatment given is a challenge too. Last but not least Diana was challenged by the fact that she had to care for four patients instead of one, which required careful time management. In addition to this Diana needed to overcome her own negative feelings in regards to working in another ward.

The feelings Diana described during this event included feeling stressed, annoyed, apprehensive, and anxious due to going to a 'new' area. She felt out of her 'comfort zone' and quite negative. She felt 'puzzled' by Arnold's complaints, and later, when it was sorted out, she felt embarrassed that she hadn't thought of it herself.

'Ellen'

Ellen qualified in the late 1970s, and has since then worked in a variety of wards. For many years now Ellen has worked in one particular area only.

Like Diana, Ellen was sent to the medical ward when her unit was very quiet. She was given a list with five clients and familiarised herself with their conditions by reading the medical/nursing notes. Due to the fact that the surgical wards were full, Ellen was informed during her duty that she had to admit a client with a fractured ankle. This client was in operating theatre at the time, undergoing manipulation and internal fixation of the fracture. Ellen could barely remember the last time that she had had any dealings with a surgical client, let alone collect a client from operating theatre needing post-operative care. The other nurses in the ward also lacked surgical experience to be of any real assistance to her.

After Ellen had shared her experience the following micro-moment time-lines were identified:

1. *Ellen is asked to work in another ward.*
2. *Ellen is given a list of five client*
3. *Ellen is informed of admitting a client straight from operating theatre.*
4. *The client arrives from theatre.*
5. *The initial post-operative client assessment.*

The main challenges for Ellen can be summarised as how to cope in an environment that is not her usual place of work, and how to deal with her own perceived lack of knowledge regarding the care of surgical clients. In regards to her client she needed to decide how and what to assess and how to interpret her findings.

Ellen described some very strong feelings in regards to this event. She usually feels very secure and confident in her 'own little patch'. Being asked to go somewhere else triggered feelings of fear. Ellen talked about 'being very scared' to do the wrong things, to make mistakes. She felt 'unbalanced', lost, and inadequately prepared to work in another environment. Ellen was 'brassed off' because of the management decision to admit a surgical client into a medical ward, and the lack of information available in regards to how to care for such a client.

‘Fred’

Fred is a Registered Comprehensive nurse who qualified in the early 1990s. Fred has experience in surgical and medical nursing as well as Accident and Emergency (A&E) and works in a busy ward.

Fred's story related to a time when he was asked to help out with a trauma case that was expected to arrive in A&E. While waiting for his trauma client, Fred decided to see whether he could assist a nurse who was behind a curtain with a client. This nurse (Carol) was looking after a client (John) who had chest pain. John was in a poor physical condition, and Fred was amazed and concerned about the fact that Carol appeared to pay no attention towards his poor condition. She indicated to Fred that she did not know exactly what to do in the situation and as a result of this Fred felt

obliged to stay and assist her. Slowly the situation changed, and soon Fred found himself not only in charge, but also on his own in the situation. Carol was no longer there and Fred noticed that John's condition was steadily deteriorating to the point where he started to lose consciousness. Fred called out for help and commenced the initial steps for resuscitation. As no assistance came, he yelled out again which resulted in staff coming to his aid. John was intubated and full resuscitation carried out. While the initial CPR attempt was successful, John's condition deteriorated further and he died in A&E.

After Fred had shared his experience the following micro-moment time-lines were identified:

1. *First impressions and initial assessment of situation.*
2. *Assisting Carol with the care of John.*
3. *Finding John alone, without a nurse.*
4. *Calling for help as John further deteriorates.*
5. *The resuscitation phase.*
6. *The post-resuscitation phase.*

The main challenges for Fred can be summarised as coping with an emergency situation in an unfamiliar environment and with staff he had not worked with before. Trying to deal with a colleague who appeared to lack knowledge and who did not take control of the situation. How to deal with the situation when he found himself on his own was another major challenge to Fred.

Fred described feelings of confusion and panic during his first contact with John, as he felt that Carol did not prioritise her nursing actions in the way Fred expected. He felt frightened, which developed into anger, when he realised that Carol did not have the knowledge one would expect from a nurse working in such an area. Fred felt not only very stressed but also responsible for taking control of the situation.

'Gwenda'

Gwenda obtained her General Nursing and Obstetrics registration in the 1960s, and has ever since worked both within the general hospital setting as well as in district nursing.

Gwenda's story is different from the other events in that it doesn't take place in an institutional setting but in the client's own home. It is also worth noting that, while all other participants selected events that they themselves considered stressful, Gwenda selected something that she did not describe as 'stressful'.

Gwenda's story related to a situation during a weekend duty when she was called to visit an 88-year-old lady (Ann) in her home. Ann suffers from Chronic Obstructive Respiratory Disease (CORD) and long-standing heart problem (heart failure). She also had a Cerebro-Vascular Accident (CVA) four years ago. Ann has only limited mobility with a rolator frame. Ann is married and her husband (Tim) looks after her with the assistance of the district nurses. Ann had developed flu like symptoms that slowly got worse and her husband couldn't get her out of her chair into her bed. Gwenda and a caregiver went to the house to assist. Gwenda assessed the situation and felt that it would be better for the both of them if Ann was admitted to hospital so she asked Tim to call the doctor. Gwenda couldn't wait until the doctor's arrival so she left to continue her 'round'. Due to it being a weekend, the 'after hours' doctor who came didn't know Ann. He did not admit her but prescribed antibiotics and a cough mixture. Gwenda visited later in the day again to help Tim and to collect the prescribed drugs from the pharmacy. She was quite upset that the doctor had not admitted Ann to the hospital.

After Gwenda had shared her experience the following micro-moment time-lines were identified:

1. *Receiving the phone call with a request for help*
2. *Getting Ann back to her room*
3. *Assessing the situation and deciding to inform the doctor.*
4. *Helping Ann to accept her possible admission into hospital*
5. *Revisiting the clients later in the day.*
6. *Ann's admission into hospital after the weekend.*

The main challenges for Gwenda can be summarised as ensuring a safe transfer of Ann to her bedroom, as well as assessing what needed to be done in regards to her further management. To get Ann to agree with the proposed course of action was another challenge.

The feelings Gwenda described during this event included feeling concerned about Ann's welfare as well as Tim's ability to cope with his partner. Gwenda felt disappointed and confused as to why the GP on duty hadn't admitted Ann. She felt relieved when Ann was referred to the hospital the following day by her own GP.

'Helen'

Helen registered in the early 1980s as General and Obstetric Nurse. She has gained experience in almost all hospital areas.

Helen's story related to a situation when she cared for a young man (Ben) in his mid thirties, who had been admitted with acute diabetic ketoacidosis. Ben was on insulin/dextrose infusion, and had vomited on a number of occasions during Helen's duty. Ben mentioned that he felt worthless and that he had stopped taking his insulin quite deliberately. Helen learnt that Ben had attempted suicide in the past.

The following day Helen looked again after Ben who remained on the insulin infusion because his blood sugars were still very unstable. Suddenly, Ben announced that he did not need to be in hospital as he felt he was perfectly well. Ben's whole demeanour changed, and he became very agitated and adamant that he was going home. Helen discussed the wisdom of his decision, but Ben did not accept anything of what Helen said. Helen got him to agree to wait until the doctor had reviewed him.

While waiting for the house surgeon, Ben became increasingly agitated and annoyed with the whole situation. He wanted to remove his intra-venous line (IV) and Helen felt that he was no longer thinking in a rationale and ordered way. Helen decided to ring the crisis team to outline the scenario, and requested for the crisis team to come. A crisis team member assessed Ben and felt that he was in no state to make a decision. Ben was sectioned under the Mental Health Act and the psychiatrist on call was informed.

The psychiatrist examined Ben and concluded that he was perfectly fit and able to make decisions and not a risk to himself in any way. Because Ben did not fit the criteria according to the Mental Health Act he was able to discharge himself later that evening. After Helen had shared her experience both Helen and the researcher identified and named the following micro-moment time-lines:

1. *The realisation that Ben did not feel good about himself.*
2. *Ben expressed and discussed his suicidal thoughts with Helen.*
3. *Ben's intention to discharge himself even though his medical condition was still unstable.*
4. *Ben's insistence on going home and his increased irritability.*
5. *Helen's decision to inform the mental health crisis team.*
6. *Ben is sectioned under the Mental Health Act.*
7. *The findings from the psychiatrist that Ben was capable of making decisions for himself, including self-discharge.*

The main challenges for Helen can be summarised as the need to assess Ben in order to make appropriate decisions. Keeping Ben safe and reducing his irritability was another big challenge.

Helen described how she felt somehow relieved to find out about Ben's mental state because at least it explained the condition he was in. She felt frustrated that she was unable to rationalise with him regarding his actions, and she felt worried and anxious regarding his plan to discharge himself. Helen felt thoroughly confused as to how a psychiatrist, who did not know the client, could decide in a few minutes that Ben was able to make rational decisions.

'Isabel'

Isabel has been a Registered General and Obstetric Nurse for over 20 years, and has a special interest in neo-natal nursing.

Isabel's story related to a situation when she was caring for a little baby (Jimmy), who was born at home two days previously. The mother (Karen) was in her late thirties.

Jimmy was admitted to the unit because he was not feeding and had not had a wet napkin for over 24 hours. Karen wasn't happy with the idea that Jimmy needed to be admitted and was reluctant to come into the unit. However, after some discussion she agreed to the admission.

In regards to the Jimmy's treatment the medical staff suggested intravenous fluids, as he was unable to suck properly because of tiredness, a very receding chin, and facial palsy. Karen objected to this and wanted to continue with breast-feeding. Once it was demonstrated to her that Jimmy wasn't drinking enough she agreed to ora-gastric tube feeding and additional bottle feeding with a special teat (Rosti). Isabel described the mother as 'very difficult' to deal with.

Despite trying to involve Karen in the decision making, she became increasingly abusive towards nursing and medical staff, up to the point where staff feared a physical assault. Isabel became increasingly concerned for Karen, who looked 'dreadful' and whose behaviour was no longer 'reasonable'. Isabel and other nursing staff suspected that Karen was abusing drugs. Karen's behaviour deteriorated even further to the point that security personnel needed to be present as staff and other parents felt unsafe. Social welfare became involved and it was suggested to Karen after a number of discussions that Jimmy might be better off in foster care. Karen disagreed with this and after three weeks Jimmy was discharged home.

After Isabel had shared her experience the following micro-moment time-lines were identified:

1. *The initial contact with Jimmy and Karen.*
2. *Karen's refusal to accept the suggested treatment.*
3. *Karen's acceptance of additional feeding methods.*
4. *The visit from Jimmy's father.*
5. *Karen becomes increasingly abusive towards staff.*
6. *Karen's anger outburst when she discovers that staff suspects drug abuse.*

The main challenges for Isabel can be summarised as how to effectively communicate with the mother to ensure her co-operation and thus increase the effectiveness of care for the baby, as well as 'trying' different feeding methods in order to select the best

approach. Keeping 'cool' and professional, using a whole array of coping, communication, and management skills was another aspect that was considered a real challenge by Isabel.

Isabel recalled feeling 'a little anxious' as to how long the mother would remain agitated, and she felt extremely frustrated and a little annoyed that she couldn't get on with the 'job' as planned. She felt a little angry about the abusive language used by Karen, and confused as to the need for this type of language. Isabel felt really scared at times and thought that Karen would become violent.

'Jane'

Jane has been a Registered General and Obstetric Nurse for nearly two decades. Jane has worked in a variety of wards from intensive care to paediatric-oncology and in a variety of positions from staff nurse to charge nurse.

Jane's story related to an occasion when she was in charge of a number of clinical areas. At a certain stage a 44-year-old man (Alex) was admitted with chest pain. Her initial assessment was that he appeared to be a fit man of average weight with a history of smoking. Morphine was prescribed and administered but he was still in pain. A Streptokinase infusion was in progress. His breathing was shallow with periods of apnoea lasting around 20 seconds. Jane instructed the staff nurse to keep a close eye on his respiratory rate, and his oxygen saturations, and to inform the medical registrar if any changes occurred.

About 45 minutes later Jane received an arrest call. On arrival in the unit she found that Alex had a respiratory arrest. CPR was commenced and was successful. Some time later Jane received another arrest call and this time she found that Alex had a cardiac arrest. His condition deteriorated fast and it was difficult to maintain effective ventilation. The registrar who attended the CPR was not taking responsibility for the overall co-ordination of the procedure and Jane found herself pushed into a situation in which she had to take more and more control. She asked the registrar several times to intubate Alex but the registrar was unwilling to do it. Jane grabbed the equipment needed for the intubation and told the registrar that, if she did not intubate Alex, she would do it herself. The registrar finally agreed and intubated Alex successfully. The situation had worsened in the mean time and Alex had developed severe pulmonary

oedema. He was literally drowning in his own fluids. Alex's heart was too weak to sustain life and he died during this second CPR attempt. After the unsuccessful CPR attempt the registrar left Jane to deal with Alex's partner.

After Jane had shared her experience the following micro-moment time-lines were identified:

1. *Jane is informed of a new admission and visits Alex in the unit.*
2. *The first arrest call from CCU.*
3. *Alex is successfully resuscitated.*
4. *Jane is involved in the second resuscitation on Alex.*
5. *Alex requires intubation.*
6. *Dealing with the family.*
7. *Jane follows up with her manager.*

The main challenges for Jane can be summarised as making sense of Alex's condition and the assessment of it. She felt challenged as to the reason why he experienced a respiratory, and later a cardiac arrest. 'Making sure that everything is there, that people are functioning in the right way' was also mentioned as a challenge as was her own indecisiveness in regards to Alex's partner. On the one hand she wanted her there, yet on the other hand she knew that the experience must be very frightening to her. Another major challenge for Jane was how to address unsatisfactory performance of a number of staff at the time when the arrests took place.

Initially Jane did not have any particular feelings other than general concern for Alex's well being. Jane maintained that she always goes into an arrest with fright. Although the first CPR was successful, she did not feel elated rather, she felt frustrated by the performance from the registrar. The second CPR had a 'huge impact' because of all the feelings she was experiencing: fright, fear, anger, frustration, and confusion. These feeling were due, according to Jane, to the 'unstructuredness' of it all and the fact that people did not do what they were supposed to do. Looking back, Jane experienced a feeling of absolute disappointment with the whole situation, and sadness for Alex, and his partner in particular.

Summary

The above abstracts, which describe the participants' experiences, are intended to provide the reader with some insight as to how the participants perceived their situations, what aspects they saw as challenges, as well as the emotions and feelings that accompanied the situation. It was the participants as actors within these situations, who somehow created order amidst the 'chaos' and it is from their understanding at that particular point in time, that this study attempts to analyse what it is that participants reflect on to create meaning of, and insight into, the situation.

The ten events resulted in a total of 59 steps, every step was unique in itself, and in how it related to its previous and next step. Creating understanding and meaning of each step is like reading a book; people do not 'deal' with text sentence by sentence, but rather chapter by chapter. Likewise, participants did not deal with their world by isolating the steps or events; rather steps or events were seen within the larger structures of relating/caring and nursing practice.

Although the narratives used for illustrative purposes during the analysis provide in-depth details of the individual events, the reader is reminded that the events themselves are not the focus of this study. Interesting as they may be, the focus is on reflective thinking, and on exploring how nurses reflect as well as the focus of their reflective thinking in clinical practice.

SITUATIONS: CHALLENGES, EMOTIONS AND FEELINGS

Nursing is a social act involving communication and interaction between human beings. Analysing nursing situations is thus an exploration of social situations within the particular environment in which they occur. Such an analysis is, and will remain a challenge because:

- Social situations are 'real life' situations, per definition always 'in motion', that do not wait until the analysis is finished;
- Each situation is embedded in, and connected to other situations, making it impossible to isolate the phenomenon under study without losing some aspect;

- Every situation is a sequence of chronological steps, each one of them contributing in varying degrees to the individual's perceptions, challenges, emotions, and feelings;
- All participants are inherently involved in the situations, and it is only from their perspectives and horizons that observations must be understood.

As stated before, every event is made up of a range of micro-moments, or steps, but not all steps represent the same degree of challenge, or evoke similar feelings or emotions. Some micro-moments are nothing more than an *intermediate stage* between two steps. Although these moments are important too, because of their connecting function, they might shed little light onto how participants made sense of 'problematic situations'. For illustrative purposes, this study uses those specific micro-moments that best demonstrate how nurses used reflective thinking in order to create understanding.

Situations

This study explored reflective thinking in nursing practice by examining how, or in what way participants created sense, or meaning, from the situations. Each practitioner discussed the situation from his or her point of view, hence it is important to start off with an examination of the concept of perception.

Perception as a concept refers, first of all, to the act or capability to perceive or detect stimuli or information from the outside world by means of sensory receptors, which include taste, smell, touch, sound and vision. It is only through these sensors that people are able to maintain communicative contact with the wider world. Perception involves more than 'just perceiving' stimuli from the outside world, and although definitions of what perception is vary, there appears to be a general agreement that perception involves the use of previous knowledge in order to interpret the stimuli that are registered by our senses (Matlin, 1983). People 'translate' their perceptions by means of cognitive processes in order to create meaning of the world. These cognitive processes include sensory memory, attention, and pattern recognition (Matlin, 1983). Although these three processes are discussed separately below, they are all very much interrelated and overlapping.

- Sensory memory is important because of the need to hold, or store raw data long enough or until such time that it can be further interpreted. As such, sensory memory plays a vital role in cognition.
- Attention can best be defined as a concentration of mental activity. People are continuously exposed to enormous amounts of stimuli and can not possibly attend to all of it. The need to choose which data to attend to and which data to ignore (selective attention) becomes not only critical, but also effects the way in which the world is perceived.
- Pattern recognition is a complex process that involves the identification and comparison of stimuli with information in other memory stores. Although stimuli sets the process of pattern recognition in motion, our knowledge about how the world is organised, the context in which the event takes place, as well as our own expectations, helps us identify patterns. The notion of pattern recognition will be discussed at a more in-depth level in chapter 5.

People bring, what Knowles (1980, p. 44) referred to as 'a rich reservoir of experiences' to every situation. This rich reservoir, not only includes previous experiences, but also peoples' cognitions, their cultural '*baggage*', their assumptions, emotions and feelings, their physical abilities, and their self-concept.

The perception of a situation is thus dependent on two factors:

- The person's ability to perceive and interpret a wide range of external stimuli;
- The person's cultural baggage. The latter not only determines which stimuli to 'pick up on' and respond to, it also alters, moulds, and influences the final interpretation or meaning of the situation.

Creating meaning is an intellectual activity by which human agents manipulate experiential representations in order to understand and/or act. Meanings are 'subjective realities' and allow human agents to structure experiences to make them manageable and understandable in order to exercise a measure of control. Moreover,

meanings are socially constructed and sustained through social conventions, including linguistics (Hall, 1989).

Meaning, in this study, refers to the sense, understanding, or significance that has been allocated to a specific situation by the actors (participants) themselves. Jarvis (1987) maintained that humans are meaning seeking animals. This study maintains that humans might be more accurately described as meaning-making individuals. Meaning is not a noun, 'a something' that has been 'out there all along' waiting to be found. Rather, meaning should be seen as a verb. Meaning is made or 'created' by the actor-in-the-situation in order to gain a sense of 'control'. Meaning as the 'end product' of interpreting external information, is inherently influenced by the person's personal reservoir. Meaning is always subjective in the sense that the meaning imposed on a situation is of the individual's own making and validated in social interactions. A social situation has no meaning in itself or for itself. It needs to be emphasised that the person's reservoir not only enables, but also restricts meaning making.

Where does all this leave us as far as the participants' situations are concerned? Maybe the most important notion is that there are no 'real' situations 'out there'. Each person perceives the situation in a unique way and gives it meaning in accordance to his or her own perceptions. Dewey (1933, p. 18) maintained that: "Only when things around us have meaning for us, only when they signify consequences that can be reached by using them in certain ways, is any such thing as intentional, deliberate control of them possible." People will act or respond in accordance to the meaning they themselves ascribed to the situation.

To demonstrate the influence of perception, and the resulting meaning ascribed to the situation, let us turn to Diana, one of the participants in this study. (The text in *Italics* is the micro-moment as identified during the interview, while the number in front indicates its chronological place in the event.)

1. Diana is asked to work in another ward.

Diana described her perception of the situation as follows:

I haven't had horrible experiences helping in other wards. I generally find people very nice but I've heard stories from lots of other colleagues that have had terrible experiences. So there is always a little bit of apprehension when you head off somewhere and you think: "Am I going to have a horrible duty, is this going to be really hard going?" Whenever you get sent somewhere everyone you're working with goes: "Oh no, not there!", and you think: "Oh yuck, this is really going to be horrible." So you head off with a negative attitude. I always feel a little bit stressed and annoyed but it usually settles down within half an hour. I think it makes it harder, so I guess for now I try and head off with a more positive attitude and just think: "Oh well, I'm going away for a day, I'm going to meet some other nice people, get to talk to my patients a bit more, that will be nice." Trying to think of it positively, as I'm walking down the corridor to where ever I've been sent helps.

Diana's example demonstrates that her perception of the situation is the result of much more than personal experience alone. She stated that she herself did not have horrible experiences, but she was well aware of the 'stories' about certain areas. It was her colleagues' narratives that had a very strong influence on how she perceived her situation. Diana described how she initially felt stressed and annoyed about being sent to another ward. It was only with a conscious effort of thinking 'positively' that she was able to change her own perceptions and give the situation a different meaning.

This excerpt also illustrates that perceptions might occur at a rather superficial level, more based on 'hear-say' rather than on a critical evaluation of personal experiences. No matter on what foundations the perceptions were based, the created meanings and the consequences of these meanings were reflected in Diana's experience of her situation in totality.

Isabel's situation wasn't too dissimilar from that of Diana. When Isabel and her colleagues received their morning report from the night staff they were informed about a 'difficult' mother who was not happy with the treatments and cares provided by staff.

1. The initial contact with Jimmy and Karen.

Isabel: I took this patient because the rest of the staff did not feel confident about coping with mother after the report that we had had from the night staff. It presented me with a challenge, enjoyable is not

quite the right word, but it was a challenge in communication skills. I felt perhaps a little apprehensive about how mum was going to react to what we suggested. I tried to sort of keep my emotions in the initial stage under control because I felt that if I had let any emotion be present too much I would not have dealt coolly and open-mindedly with the situation.

Whatever was said during the 'hand-over' report, the day staff perceived the situation as difficult. As a result of this, most staff decided that they felt unable to cope with the situation, even though these nurses had not met, or spoken with, the mother.

It is interesting to note that both Isabel and Diana mentioned the influence of one's psychological state on the whole situation. Diana talked about the importance of maintaining a positive attitude, while Isabel noted the requirement of having to remain completely non-judgemental, and open-minded in this situation. Isabel's notion, if applied effectively, might counteract or reduce the consequences of perceptual categorisation a process that permits one to go beyond the properties of the event perceived, and predict other properties of the event not yet tested (Bruner, 1974).

Challenges

This study defines the term 'challenge' subjectively as:

Any situation within the experience when the person felt personally obliged to do something, called something into question, needed to find something out, or made a demand related to that particular situation.

Defined as such, challenges are an inherent part of holistic nursing practice. Nurses find themselves regularly in unique situations that require careful assessment, as has been demonstrated by the events shared by the participants in this study. In order to practice effectively, nurses are challenged by, and need to make sense of, a myriad of complex situations.

Similar to the discussion on 'perception', it needs to be emphasised that a challenge is whatever the person perceives it to be, and this includes the impact of it on the individual. Challenge, like beauty, is in the eye of the beholder.

The participants in this study labelled situations that involved uncertainty of outcome as a challenge. Not knowing where a situation would lead to, not knowing whether their actions were 'right or wrong', contributed to feelings of uncertainty regarding the situation and/or the outcome, and were often mentioned as a major concern and challenge. (Please note that right and wrong actions in this context do not refer to ethical issues per se). For example Betty had to make decisions that were not in line with the usual ward policies. The challenge in her situation was not whether the rules should be bent, but the uncertainties related to the potential 'fall-out' from her decision. Betty knew that there would be opposition but she wasn't entirely sure in what way, and how intensely her colleagues would respond.

Clare decided to 'challenge' a doctor about the client's right to request a second opinion. Surely Clare, like every other nurse with experience, is well aware of the powerful position doctors have within the health institutions. Questioning the actions of someone in a higher position than yourself without being able to 'calculate' the risk factors is full of uncertainties and very challenging indeed.

Diana and Ellen both selected an event related to working in an unfamiliar environment. Not knowing how the day will work out, not knowing the clients or staff, not knowing the usual ward routines all contributed to a far from certain outlook. Coping in an unfamiliar environment was considered by both of them to be a major challenge.

Jane and Fred were both involved in an emergency situation that included full CPR procedures. Their situations are extremely challenging, not only because of the stress involved, but also because the outcome is very uncertain. Deciding whether and how to deal with under-performing members of staff during the emergency was another major challenge.

Dealing with clients who were considered mentally unstable contributed for a large degree to the uncertainties that were experienced by Helen and Ann. Both their clients talked about wanting to commit suicide and became increasingly irritable. Both nurses were uncertain where the situation would lead to and whether they were able to ensure client safety.

In order to care for a little baby, Isabel had to establish a working relationship with a mother who, as was confirmed later, abused drugs and whose behaviour was very unpredictable. Furthermore, the mother's anger, her ineffective communication pattern with the staff, and her inappropriate perception of priorities for the baby contributed to the uncertainty as experienced by Isabel.

It must be noted though, that uncertainty of outcome in itself was not sufficient to label the situation a challenge. Other factors, such as the importance attached to the situation, the degree of professionalism required, the degree of decision making, and the uniqueness of the event all played a part in determining whether the situation was a challenge or not. Safety issues are considered paramount in nursing, and it is no surprise to find that six participants mentioned the importance of ensuring safety for their clients as a major challenge within their particular situation.

Participants expressed in varying ways their personal/professional involvement. Overall, professional integrity and responsibility was considered extremely important. Isabel mentioned that: "... remaining cool and professional was a major challenge." Betty talked about the challenge of: "... remaining professional, trying to be mature about it" Both Fred and Jane referred on a number of occasions to the role and responsibilities of a Registered Nurse.

All situations reflected events in which the participant in question played a major role, was largely responsible for the outcome and as such was deeply involved in the decision making process. All situations contained elements during which participants felt 'out of their depth' or rather confused as to what actions to take.

The perceived uniqueness of the situation most definitely contributed to the challenge. All participants in this study were asked in the pre-interview meeting to monitor their practice over the following weeks, and to contact the researcher if they experienced a situation that they considered to be unusual, problematic or, not experienced before. It is interesting to note that when the interviews took place all participants, except for Gwenda, had selected events that had occurred some time prior to the pre-interview meeting, in one case more than four months earlier.

Emotions and Feelings

Although strictly speaking emotions and feelings might be seen as different entities, for the purpose of this study both concepts refer to a state of mind, a mental impression or 'deep' feeling, or a sympathetic/sensitive appreciation. For the remainder of this section the word 'feelings' will be used to represent all of the above.

It needs to be stressed that not all participants were at all times aware of their feelings. On occasions some participants were unable to recall, or express their exact feelings related to a particular micro-moment. Many participants, even if they were overwhelmed by the situation, experienced a range of feelings simultaneously that fluctuated in duration and intensity. The section below will explore some of these feelings more in-depth.

The feelings participants experienced related to the impact of the event on themselves as human beings. Except for Gwenda, all participants selected events that they themselves described as (very) stressful. Among the feelings most often recalled in these stressful situations were feelings of insecurity. These feelings related especially to being unsure about what was happening at the time, and/or being unable to predict how a certain situation would work out. Feelings of insecurity were expressed as 'feeling confused', 'loss of balance', or 'feeling out of your depth'. This was particularly so if the nurses saw themselves as responsible/accountable for resolving the situation. In these cases the nurses were also more likely to describe associated feelings such as fright, fear, shock, or guilt.

Where participants did not see themselves, but 'the system' as contributing to the cause of the problem, these situations resulted more likely in feelings of frustration, disappointment, and/or annoyance. For example Clare and Jane felt frustrated and annoyed by a system that allowed doctors to practice in a unprofessional way or without appropriate back-up, while Diana, Ellen, and Fred experienced similar feelings because 'the system' allowed nurses to work in a clinical area without the necessary expertise or orientation.

Anxiety was another feeling reported by a number of participants. Interestingly, it seemed to coincide with those situations where practitioners had to attend to immediate care and were required to put aside goals or tasks they had planned earlier.

For example Ann, Betty, Fred, and Jane experienced anxiety because the situation at hand either interfered with their responsibilities for other clients, or altered certain ingrained routines. On some occasions these anxieties further developed in feeling 'panicky'.

In regards to experiencing very stressful situations and the accompanying feelings one participant, Jane, shared the following:

I don't know. I mean, the steps I go when I get an arrest call on my pager, is things like, I try to imagine who it might be, and sometimes you can do that and sometimes you can't. I think about the things that I am going to do when I get there. I sort of prearrange my mental thoughts, so I'm sort of thinking on the run, trying to think about all the basic stuff, and when I get there I just go into automatic mode. . . you know it's automatic and that's how I function in an cardiac arrest. I always go in with fright and fear but I'm on automatic. I automatically know what to do, what my role is, in any arrest situation and that's what I do, you know.

Going into an 'automatic mode' seemed to assist Jane to work things through mentally, to recall usual 'routine' responses and to pre-determine priorities. However, going into an automatic mode also enabled Jane to deliberately 'suspend' her feelings to preserve her personhood and 'carry on' professionally. The following excerpt, in which Jane describes what she did when she had to inform Alex's partner of his death, demonstrates this very clearly:

To tell the wife . . . I did it automatically, you know, like I put myself into automatic modes. I know when I'm doing it and it's because whatever is happening around me is so traumatic that it's really important that I don't fall apart. So I just go into automatic mode and I'd done that to deal with the enormous sadness that she was experiencing.

The above excerpt does not imply that Jane, as a result of 'suspending' her feelings, has altered her attitude and has become a 'cold-hearted' uncaring nurse. Rather, it appears from her discussions that she is only able to maintain compassionate care if she is able to control, or temporarily suspend, her own human emotions in order to focus on the need of the other. Jane talked about the importance of spending time with family and assisting them in coping with their grief:

I'd rather know that the family was told nicely and that they were given the time to grieve. I rather see it done by somebody who did it all (support family), and not by somebody who doesn't want to be there. If someone isn't compassionate about it and doesn't want to be there then he/she won't answer their questions properly, tell the family really abruptly or give them no time to ask questions and come to grips with the situation.

Feelings played an important role in all micro-moments and participants frequently referred to their feelings as an inherent part of their connectedness to the situation. While some of the feelings described above can be interpreted as less desirable or even 'negative', the reader is reminded that these feelings were associated with very stressful events that had a major impact on the participants who were struggling to make sense of the situation. Of course, depending on the perception of each micro-moment within the situation, participants also described feelings of elation, discovery, satisfaction, and relief, especially when difficult or tense situations were resolved, when participants suddenly could make sense of what was happening, or when participants felt that they were instrumental in improving the situation.

SUMMARY

This chapter provided a short introduction to the ten participants in this study. An abstract of the nurses' experiences was included to 'set the scene'. To ensure anonymity and confidentiality the information provided was limited and, where possible, deliberately altered. According to the operational definition of reflective thinking, people engage in this particular cognitive activity in order to make sense or create meaning. It is unlikely that individuals use reflective thinking in routine situations. Assumptions and taken-for-granted views play a major part in dealing with routine situations that may lead to habitualised responses. However, when encountering non-routine situations, the need to create meaning becomes more urgent. Within the ten non-routine events a total of 59 micro-moments were identified and chronologically listed. Each of the micro-moments was explored in regards to the impact of the micro-moment on the participant, the challenge it presented, and the associated emotions/feelings. Exploring these aspects is important, because reflective thinking does not take place in isolation but occurs in, and is influenced by, the wider context. Examining factors that contribute to, or influence, the way participants

created meaning will also shed light on aspects of reflective thinking. As demonstrated, thinking and meaning making was inherently influenced by the participant's reservoir that included previous experiences, cultural baggage, assumptions, emotions and feelings. Participants did not enter into a micro-moment without at least some pre-perceived ideas.

CHAPTER FIVE

EXPERIENCE: GAPS, CONFUSIONS AND QUESTIONS

INTRODUCTION

Making sense, or creating meaning, is a complex and difficult process that involves the bridging of external events with internal understandings. Dervin (1996) maintained that human beings create meaning individually, and collectively, as they move from order to disorder and from disorder to order. The 'end product' of this process is 'reality' which is neither complete nor constant, but which nevertheless guides subsequent behaviour.

Nursing practice is marked by many non-routine situations, each of which presents its own unique challenge for the practising nurse in terms of determining what the 'right' action or intervention might or might not be. Each time a nurse comes across a new situation he or she faces the challenges of a 'gap'. Gaps occur when a practitioner is confronted with a situation that 'doesn't make sense', or that is 'at odds' with previous experiences, giving rise to feelings of inner discomfort, unease, frustration, anxiety, and so on. If humans are meaning-making individuals, as argued in chapter 4, then humans must have a natural tendency, or desire, to eliminate gaps in order to make sense. The literature maintained that individuals make sense of, and create meaning from, new and/or unusual/problematic situations by engaging in reflective thinking.

This chapter does not look for differences between participants' perceptions of their situations as it is acknowledged that all people and all nursing contexts are unique. Rather this chapter examines how participants 'made' their world through reflective thinking. In other words the focus is on:

- How individual participants made sense of their experiences;
- What participants saw as 'gaps' that needed to be bridged or overcome;
- What strategies were employed in order to bridge perceived gaps.

The following questions were used to identify perceived gaps, and to explore what it was that participants did to resolve these gaps:

- How did this event relate to previous experiences?
- What questions or confusions did you have?
- What aspects in the situation prevented you from getting answers?
- What would have helped you, and how would it have helped you?

THE USE OF EXPERIENCE IN CLINICAL PRACTICE

Clinical practice is at the heart of nursing. Reilly & Oermann (1992, p.2), defined practice as: "... a deliberately planned sequence of actions carried out by highly skilled individuals in response to particularized needs of clients'. The word 'actions' refers to the activities, the 'doing' aspects of nursing, while particularized needs refers to the distinctive needs of the clients in a specific context.

The importance of clinical experience has been well documented in many nursing articles and books, most notably by the writings of Benner (1984) and Benner et al. (1996), who noted that clinical practice is always more complex and offers more realities than can ever be captured by any theory. Indeed, the problems of 'real-world' practice can not easily be overcome or mastered, as they do not present themselves to the practitioner in orderly little packages or well-formed structures. Rather the nurse-practitioner confronts complex and ill defined clinical situations in which client-nurse-doctor relationships, availability of time and resources, as well as environmental, political and multi-professional factors are all interrelated. The subtleness of experience is clearly demonstrated by Clare, one of the participants.

Clare: I've never actually had to phone a consultant over another consultant before, but I've certainly phoned doctors to come and see their patients because they were either unwell or for whatever reason. You learn very quickly how to approach the different doctors and what information they want. So you make sure you always have that sitting in front of you. I usually always give a 'blurb' on the phone first, explain the situation, and then wait for their answer. This particular consultant, I would not approach him on a very bad day. Yeah, usually you see him coming in the ward and you know exactly

what atmosphere is going on around him, where he's at, you can just tell.

Benner (1984) maintained that it is only learning from experience in the real context that leads to the professional becoming an expert practitioner. However, in order to learn from experience, one needs to be able to make sense of the situation. The following section explores how participants engaged in reflective thinking used past experiences in an attempt to create meaning.

Exemplars

Ann and Helen provided narratives which demonstrate not only the effects of experience on their practice, but also how experience (or the lack of it) helped them (or hindered them) to make sense. Ann has two years of experience mainly in a general medical ward setting. Helen has many years of nursing experience and has cared for mentally unstable clients on a number of occasions before. Their narratives were chosen, because both discussed an event that related to a client with suicidal ideation. Both were asked how particular micro-moments related to their previous experiences in order to be able to examine the influence and effects of experience on meaning making.

Although the relationship between the situation, the impact of the situation, and the person's feelings was discussed in the previous chapter (chap. 4) the following two micro-moment excerpts provide additional examples.

1. Ann needed to make sense of the skin complaint that Chris had.

Ann needed to make sense of a skin complaint. Due to her limited knowledge of skin conditions Ann needed to resolve for herself what it was that she needed to do in order to care for Chris. The doctor had asked her to carefully observe Chris, and to take lying and standing blood pressures whenever a new lesion appeared. Ann felt confused at this stage, partly because of her limited insight and experience, as well as her inability to see the link between the skin lesions and the requirement to take blood pressures.

Ann: Well I was confused. I don't know much about skin conditions so you basically went along with the doctors. After I did the observations a couple of times, I actually asked the house surgeon what was the point of doing lying and standing blood pressures, what were they looking for? I remember him saying that if it was the condition they were thinking of, then there would be a rise in the blood pressure. I sort of thought: "Oh, okay then, it's related to the lesions." So that made a bit more sense but I was still confused, and I can't remember the name. I actually needed to seek out the information a couple of hours later just to clarify it for myself for future reference. You know, if I come across another patient with the same then I can sort of draw on that knowledge later.

Ann had no previous experience of caring for a client with a dermatological condition. Although she was a bit confused, Ann maintained that you couldn't know 'everything'. The fact that even the doctors hadn't established a diagnosis might have contributed to Ann feeling 'not too bad' about not knowing. She did go back to the doctor later in the day and asked for more information.

Ann clearly identified a 'gap' that she attempted to close by asking the doctor for that extra information. As it turned out, at the time of the interview Ann could not recall any significant aspects of her client's dermatological condition. As the situation unfolded and changed from caring for a client with a dermatological condition to caring for a client with suicidal ideation, Ann's confusion turned into feelings of unease, concern and then fear.

5. The decision by Ann to inform the mental health crisis team.

Ann described the situation as follows:

That situation was quite significant to me. I never dealt with anything that was so life threatening. I was concerned for his state of mind. It was a new situation for me because I had never actually been involved in something like this before. This was my first situation so it was nerves on my part, cause was I doing it right? . . . All those feelings, I believe I was scared of the situation because I didn't have the training or the experience to deal with it. Whereas if we had actually been given the opportunity during our training to actually sit down and talk to a person in crisis about how they were feeling, that would have been good for developing the required skills. You get your training at tech, which is all theory, but you are not actually put into that situation. We were told how to do it, but we were not actually given

the chance to do it with an at risk patient. Those skills could have carried over into the 'real' situation. The whole situation had quite a big impact on me because I had never before nursed anyone that appeared mentally safe two days previous to now when there is a situation brewing such as this. I think I was scared when he started talking and probably a bit, not enough confidence in myself. Yeah, it still has a big impact on me now, and it was enough of a worry for me then to actually contact the mental health crisis team.

Aspects such as the perception of the seriousness of the situation and the associated emotions and feelings are important determinants of the meaning ascribed to the situation and the impact it has on the nurse. Ann had no previous experience in caring for clients with dermatological conditions or suicidal ideation yet, as the excerpt illustrates, the perceptual gap in the first micro-moment appeared to have had little impact on her. In the interview Ann did not express any undue concerns about her lack of knowledge, and she did not question her level or quality of nursing education. Ann described the over-riding feeling at the time as one of confusion, due to a lack of knowledge. This first narrative is in stark contrast to the second one that related to her client's suicidal ideation. In the latter micro-moment, when Chris told Ann of hearing voices telling him to self-harm, she perceived herself to be in a critical situation that required her to act. Ann talked about the impact of the experience, and during the recall she was still tearful on occasions. She indicated that it was a personal/emotional 'struggle' to come to terms with what was happening at this particular micro-moment. Her emotional response, characterised by considerable global anxiety about her own level of knowledge and performance, suggests that Ann is an advanced beginner as defined by Benner et al. (1996). Ann was unable to relate, or connect, this particular event with prior experiences. She faced a gap that needed to be bridged in order to progress. Unable to use past 'hands on' experiences, Ann did think back to what she had learnt during her nursing education. Ann's comments reflected a tension between the propositional knowledge learnt at the polytechnic and practical knowing required in the real setting: "We were told how to do it, which is all theory, but you are not actually put into that situation." Ann argued that the training at a technical institute could not substitute actual clinical experience. Ann placed a lot of value on 'hands-on' experience as she maintained that: ". . . those skills could have carried over into the real situation." While Ann was appreciative of the things she had learnt in theory, her

statements confirmed Benner's (1984) position, that clinical expertise can only be gained in the contextual setting where nurses practice.

As it was, Ann's inability to use previous experiences contributed to her feelings of self-doubt, her lack of confidence, and made her question on numerous occasions whether she was 'doing the right thing'. Ann was scared to make a mistake, to do the wrong thing, and unable to build a constructing that would bridge the gap and assist her to cope more effectively.

Let us turn to Helen who had a 'similar' experience to Ann. Helen recalled her experience with Ben, a client who expressed suicidal ideation and who became very irritable. Only the second and fourth micro-moment will be used at this stage to examine the effect and influence of experience on meaning making.

2. *Ben expressed and discussed his suicidal thoughts with Helen.*

Helen: My immediately thought was: "Right, that explains why you're in the state you're in." I had looked at him and just looked at how wasted he was and had been wondering what else had been going on with him. It is not common to see a client with long standing diabetes that is that thin and that unwell, unless there is something else paralleling it. I thought: "What's happened for this to come to a head now?" I needed to find out more about him, because until I knew more of the outside stuff, I wasn't going to get anywhere with what I was dealing with there in the ward. We often get people that are either post suicide, or have contemplated suicide, or are very depressed as a part and parcel of their illness process so it's not uncommon to have somebody sit there and state to you: "I feel like ending it all." You have to take each case totally individually. Based on my previous knowledge I could see that what was happening in this situation was outside the parameters of what I'd dealt with before. This one, while it had some similarities, was different because this person was not thinking and acting rationally. . . . It was really, I guess a: "Okay, what's making you tick?" I didn't feel this sudden great outpour of pity, or anything like that, it was just an interest in him as a person, and a needing to know how he'd got to this state, before I could even think of perhaps being able to support him in any way.

The gap faced by Helen related to making sense of the clinical picture that was presented by Ben. Helen could not understand why, as a long-standing diabetic, 'he was so wasted and unwell'. Why hadn't he sought medical help earlier?

While Ann recalled that she was fearful and scared when she realised that Chris was suicidal, Helen mentioned that she was relieved because the realisation that Ben felt suicidal helped her to make sense of the symptoms and behaviours displayed by him. Helen was now able to close the gap and apply previous experiences to help her understand the new situation. This enabled her to prioritise the care required without undue feelings of fear. Helen talked about the importance of knowing how to respond: not 'too laid back' while also preventing an 'over-kill' reaction. She mentioned Ben's interactions with her, and she noted that: ". . . he hadn't talked about it beforehand at all, like previous ones had done . . ." This comment demonstrates that Helen compared Ben's behaviour with past experiences. It is important to note that Helen's activity of comparing behaviours is highly selective. Ben's behaviour was only compared with those previous clients whom she perceived as having been in 'similar' situations. She stated that it was uncommon to see clients with 'long-standing diabetes' in Ben's condition, thus comparing his situation with that of a 'typical' diabetic client. As illustrated in the excerpt, Ben's picture did not fit the 'usual' description.

Things changed for Helen when Ben decided to discharge himself. He threatened to 'rip out' his intravenous cannula which was still in use for administering dextrose and insulin. Ben became increasingly agitated and, according to Helen, he was no longer able to think rationally. This new situation presented a gap in the sense that Helen did not know exactly how to respond. She talked about 'skating on thin ice', or a situation 'beyond my scope', and having no one around to bounce off ideas. The fourth micro-moment concerned:

4. Ben's insistence on going home and his increased irritability.

Helen: I could feel the agitation in him and I just knew that a deep and meaningful discussion wasn't the right approach to take. I was really worried for his well being. Because I don't have a background in mental health nursing, I was skating on thin ice and I felt . . . concerned, a feeling of concern or worry. I suppose you could call it a mild anxiety from the point of view of how, as a practitioner, can I maintain this person's integrity and safety and their dignity in this situation. How to facilitate things so that you get the best possible outcome from it. I've dealt with similar situations where I've had very agitated, upset people and there's no way to explain it other than that

you get a feeling for the situation. You get, from previous experiences inside and outside of work, a feel for where the person is at, and just how far you can actually go. Those previous experiences are invaluable when you're confronted with a situation like this, because you've got so much history to go by. It helped in dealing with this particular situation. It helped immensely in knowing when to push a little, when to pull back, and when to get the outside. . . . because the previous experiences have given you a bit of an insight into how people work when they're distressed. Based on my previous knowledge I could see that what was happening in this situation was outside the parameters of what I'd dealt with before. I knew that it was beyond my scope of knowledge, so I needed to have the input of people with a greater experience in the mental health area.

The above exemplar demonstrates the use of previous experiences for the benefit of the here and now. Unable to explain the exact workings, Helen maintained that previous experiences in 'similar' situations helped her to 'get a feel' for this situation, because 'you've got so much history to go by'. She went on to say that previous experiences gave her 'insight' and helped her 'see' what was happening here. It also helped her in the sense that she realised that she needed assistance from a specialist team that had more expertise to offer.

Helen's narrative also showed her emotional attunement that is central to expert conduct (Benner et al., 1996). Emotional attunement refers to the ability of the nurse to correct false emotional responses and strengthen correct ones, as well as balancing responses within the context of the situation. Helen was able to describe nuances in her emotional state, and acknowledge these feelings without becoming paralysed by them. Right throughout this crisis situation Helen was able to maintain a therapeutic relationship, and her mild anxiety did not distract her from keeping centred on Ben as a person. She expressed concern in regards to maintaining his integrity and dignity, and she talked about how to 'facilitate' rather than 'control' the situation. In contrast, Ann did not have any previous experiences that she could link to her current situation. As a result, Ann she did not 'recognise' any patterns within the experience that might have helped her to make sense. Ann felt increasingly uncomfortable and 'lonely', and was so consumed by her own anxiety and fear that she focused increasingly on herself, her own needs and abilities to cope with the crisis.

Isabel's narrative was selected to illustrate and summarise the use of previous experience for the benefit of the here and now:

I've never seen a baby quite like this before. From previous experiences you learn the different ways to feed the babies, but also the different ways in which you can 'sell' these feeding methods to mothers. You sometimes think: "Oh yes, I used this channel of communication for such and such a mother and it worked, I'll try it again this time." Yeah, I think subconsciously I'll do this and I think: "No, I won't do that because I did that once before and that mother reacted quite negatively and this mother's a bit like her so perhaps I won't do that because it's wasting time. I'll try the more positive way first so we keep the other way up our sleeve." You do definitely call on experience.

Without exception, all participants acknowledged the importance of comparing and contrasting previous experiences with current events in order to understand. This cognitive activity is described in the literature as *pattern recognition*.

Pattern Recognition and Perceptual Categorisation

Pattern recognition is a complex process that involves comparing and contrasting current stimuli with information held in other memory stores, and is one of the building bricks for the development of 'practical' knowledge. For example, by comparing and contrasting Ben's patterns with her own repertoire of examples, images, understandings, and actions, Helen was able to grasp the significance of the current situation. Having created meaning, she was able to make 'informed' decisions within the fuzzy zones of nursing. Benner (1984) maintained that nurses engage in pattern recognition, in order to develop professional expertise, and that expert nurses have a wealth of practical experience that allows them to recognise a wide range of 'patterns'. Pattern recognition enables the expert nurse to make accurate clinical judgements by identifying whether, and which of, the clinical signs and symptoms are significant. Pattern recognition contributes to perceptual grasp and enables practitioners to respond faster in an event. One can almost imagine the practitioner creating some sort of a mental 'template' of categories that will be placed over new experiences. Any similarities with previous experiences will show up and contribute to the formation of a 'pattern'. Once a pattern is recognised, the individual is not only able to make sense of the event, but also select from the memory store past strategies that were successful in dealing with the phenomenon.

The notion of pattern recognition fits well with Bruner's (1974) theory that people create perceptual categories or stereotypes. Bruner proposed that perception is a process of categorisation in which peoples move from inferential cues to categorical identities. It requires the processing and interpretation of stimuli into categories of information (patterns) that are meaningful to the perceiver. According to Howard (1987), categorisation is most convenient and efficient for cognitive activities such as perception, memory, and communication. Bruner took it even one step further, when he maintained that the process of perceptual categorisation permits one to acquire meaning which goes beyond the properties of the event perceived, to a prediction of other properties of the event not yet tested.

It was argued earlier that reflective thinking assist the individual to make sense of, and learn from, past and current experiences. One would therefore expect that concepts such as pattern recognition and perceptual categorisation, which are related to sense making, be found in the literature that discusses and examines the phenomenon of reflection. This is indeed the case. The general and the nursing literature both emphasise comparing past with present experiences as an important part of reflective thinking. Moreover, the ability to use past experiences for the benefit of the 'here and now' was seen by some authors as such a complex process that it is likened to an art. For example Schön (1983, p. 13) referred to this ability as the artistry of 'problem framing'. It is for this reason that I will now turn to the concept of framing in an attempt to establish a link between experience, pattern recognition, perceptual categorisation, meaning making, and reflective thinking.

The Concept of Framing

In order to reflect in or on a situation one must be able to 'get in touch with' and describe one's own understanding of the situation. Schön (1983) labelled this requirement 'framing', and he described how practitioners build constructions that help them to make sense of, learn from, and function in, a particular situation. A 'frame' is thus a mental 'constructing' resulting from pattern recognition and the exploration and manipulation of perceptual categories in an attempt to understand the situation. It is labelled a 'constructing' in line with the Sense-Making methodology because framing, like making sense, is always in progress. The resulting 'frame' can

thus be visualised as the temporary 'coming together' of recognised patterns and perceptual categories. As patterns and categories are dynamic and ever changing such a frame can not be a construction (noun) but rather a temporary and limited 'constructing'.

It is no coincidence that the significance of framing, in order to make sense, was also emphasised by Bruner (1990), who maintained that it provided a means of constructing an 'ordered' world, of segmenting events within that world, and of characterising its flow. Framing, according to Bruner, enabled the creation of meaning and without the ability to frame one was likely to get lost in the murky and chaotic phenomena of the situation. Framing is thus a vital component in the sense making theory, as well as an important cognitive activity within reflective thinking. Framing may be conceptualised as the practitioner cognitively sorting through a 'treasure box', or what Knowles (1980) called a rich reservoir, containing various parts of concrete experiences, suggestions and ideas, chunks of 'practical' and personal knowledge and assumptions, as well as propositional theories. Looking 'inside' the box, and then 'outside', at what is or was happening, enables the practitioner to 'frame' the situation. Framing is putting into a personal perspective what it is that is happening out there. The activity isn't unlike doing a jigsaw puzzle, in which the person tries to fit together different parts of the puzzle, in an attempt to create some sort of 'recognisable picture'.

It must be self evident from the above discussion that the ability to frame is an important asset, if not an absolute requirement, to make sense of new or unusual situations. In the waking state, human beings interact continuously with their immediate environment. Information, arising as a result of this discourse with the milieu, is cognitively processed through assimilation and accommodation. Information is thus manipulated, classified, and stored as 'knowledge' for retrieval as and when required. Framing is the second stage of information processing, and follows such activities as categorising perceptions and looking for patterns. Framing is a must, and successful framing is the first requirement in order to make sense of, and understand, the situation.

Nursing practice is full of situations where 'theory', or 'textbook' knowledge, do not possess a 'right' answer for the situation at hand. On many such occasions this results

in practitioners needing to develop new rules, methods, and understandings. Framing is a cognitive activity, used especially for those situations described by Schön (1983) as the 'fuzzy zones' of professional practice. To create meaning and learn from 'fuzzy' situations, nurse practitioners are required to re-think the knowing-in-action in ways that go beyond available rules, facts, theories and procedures. This re-thinking requires previous experiences, because the person needs to compare and contrast this particular situation with a range of past experiences in order to discover trends and commonalities, or patterns.

If framing is a fundamental requirement for creating meaning and understanding of one's situation, then this activity must be particularly evident in all new or unfamiliar contexts. This study confirmed that this is indeed the case. The following abstracts demonstrate not only framing in action, but also the influence of previous framing on the participants' current thinking.

Exemplars of Framing

Gwenda, the nurse who shared her story from the community setting, found herself in a rather routine-like situation. She assessed her client's condition to be such that hospital admission was the best option under the circumstances. Gwenda recalled that her client objected to this and said that she preferred to stay in her own home. This was the fourth micro-moment and it was labelled:

4. Helping Ann to accept her admission into hospital

Gwenda: When you've been district nursing a long time, and you are the senior nurse on at the time, you are used to making decisions. You've got to, you've got to be straight forward, and you've got to take the risk sometimes. Well you don't make it lightly (the decision to advise for admission). You do think about it, but you've got to look at the overall picture, you've got to consider Tim (the husband) as well. We have situations like that all the time. Patients just don't want to go into hospital, they prefer to be in their own home. So if I say: "I'm going to call the doctor", the first thing they ever say is: "I don't want to go to hospital." A lot of them do it, but I just call the doctor anyway, I mean it's just taken out of their hands. They can't say they don't want to go to hospital so we do it quite often. We do listen to her and we do take note, but we reason with them and I mean she was okay, she just said it once: "I don't want to go to hospital." When I

said: "Wouldn't it be better to go in for a few days, get better and then come home?" she agreed.

Gwenda has accumulated more than 30 years nursing experience and as a result of this she was able to frame the situation quickly. She recognised the patterns that were displayed by her client quickly, and she recalled that it is quite common for clients to object to hospital admission. This being more or less a 'routine situation', Gwenda did not experience a 'discontinuity' or gap at this stage. Gwenda stated that she needed to be 'firm' as she 'knew' what was required in the situation.

The following five narratives contrast sharply from the previous one in that the participants, upon experiencing a discontinuity, were unable to recognise patterns that would help them to make sense of the situation. As a result of this inability, participants could not move on, they were stopped in their 'tracks' so to speak, and needed to rethink the situation.

Diana worked in a surgical ward that wasn't her usual area. She cared for a client who had undergone surgery five days earlier. Diana wasn't entirely sure what surgical treatment was done. One of the micro-moments in Diana's experience was:

2. *Diana's client complained of feeling cold and generally unwell*

Diana: It went through my mind that he had an infection and that I needed to call the doctor, get some blood cultures taken and start antibiotics. I guess that's a bit of a routine where I work. I think our patients, when they have that high a temperature, are usually a lot sicker. I guess I was challenged by ticking through a list of things in my mind about what it could be, where the infection was coming from, what else I needed to do.

The concept of framing is very obvious from the above abstract. Diana faced a gap in understanding, as she needed to find out what the possible reason was for her client's high temperature and change in wellness. To help herself solve the problem, Diana indicated that she compared this client with previous clients she has cared for (pattern recognition). Having some sort of a mental 'tick-list', she noted that this client was, despite the high body temperature, not as sick as what she would 'usually' expect. In other words, this client did not follow the 'normal' patterns. It is interesting to note

that, because Diana had difficulties assimilating these findings in her existing framework, she was unable to make sense. In the interview she talked about her confusion regarding this. Diana was concerned that she had overlooked something, and by using the 'tick-list' she tried to ensure that she would pay attention to all probabilities. Her inability to discover patterns affected her in the sense that she did not feel particularly confident in her own abilities as a nurse.

Ellen was confronted with a surgical nursing situation she hadn't dealt with for a very long time:

4. *The client arrives from theatre.*

Ellen: You go back to whatever you've had before on the surgical floors. How did I nurse a surgical patient before? You know all this and that. You know you have been there before. I really had to search back for any patients that I had nursed, and that I could relate to. All I can remember deep back was colour, warmth, sensation, and those sorts of things. Then I get the patient. The colour looks okay, but she couldn't move her ankle. I'm thinking: "Hold on, let's think!" After that I thought it is all the swelling. "They are supposed to be able to move it, come on Ellen you know." I really was searching deep back. "Okay, it would make sense that there would be a lot of swelling, they won't be able to move it you know. Okay, that's nothing to worry about, she'll do", and then I thought: "Oh well Ellen it's a long time, maybe you should ask . . ."

Fred, the nurse in A&E, became involved in the care of John. Having worked in a similar setting before, Fred had developed a number of 'stereo-typical' views and routines that contributed to a well-established framework. This is evident from the way he talked about his client's clinical picture, as well as his expectations in regards to the required care. Expectations lead to routine situations that in turn create predictability. Routine situations contain less 'surprises' and enable individuals to 'organise' responses in advance, and contribute to increased levels of confidence about self within such a situation.

When Fred noticed that his colleague wasn't providing the nursing care that he expected to be appropriate for the situation, a disjunction, or gap, arose in his understanding. Fred described his feelings, related to the actions of his colleague, in

the initial stage as 'a bit panicky' and a sense of annoyance, but later on this feeling turned into anger. Fred's first micro-moment was labelled:

1. First impression and the initial assessment of the situation

Fred: I knew that I'd been in this situation before. I had seen lots of patients like John. I'd seen it all before. I knew what had to be done so I went about the procedures that you have to do in a situation like that. I did feel a bit panicky, yeah. You could see that the patient was in obvious distress, but you could just tell from the way that the nurse was behaving, that all she was interested in was getting his clothes off. I could see that she (the other nurse) wasn't acting in a way, in such a manner, that you would expect from an A & E nurse. She wasn't taking the prompts from the patient. I've worked in A & E and I've been with other colleagues in similar situations where they've acted faster and she wasn't, which frightened me . . . I began to feel myself panicking, could feel my heart start to pump, and experienced the adrenaline rush. I didn't feel confident in this other nurse from her reactions to me doing the ECG, telling her what was on the ECG, and her actual reply: "Hmm, I'm not very good at looking at these things."

Fred demonstrated that framing within nursing is not restricted to client-nurse situations only, and that the concept is equally applicable to all other situations that requires a person to seek understanding in order to act or move on. Indeed, framing isn't restricted to nurses or nursing, but is applicable in all situations of life where people are required to make sense.

Jane was involved in a CPR procedure concerning a 44-year-old man called Alex. Her situation differs substantially from Fred in that Jane was the senior nurse and therefore expected to take the lead in any crisis situation. Jane is able to rely on, and use her vast amount of previous CPR experiences.

4. Jane is involved in the second resuscitation on Alex:

Jane: A lot of the times you go into an arrest, and it may sound quite callous, but you can go into an arrest and you can judge pretty much in the first 30 seconds whether its going to be a successful arrest or not. . . . mainly by looking at the person, seeing how blue they are, what their heart rhythm is, their medical history and all this sort of stuff, and how well the (treatment of the) 'arrest' is going . . .

Alex did not follow the usual 'pattern' which Jane had seen many times before in other cardiac arrest situations. Due to severe congestive heart failure, Alex produced enormous quantities of pulmonary oedema:

Jane: I just couldn't understand the pulmonary oedema one. That was the biggest question to me, you know, it just seemed so foreign to me. I couldn't understand why there was so much fluid, I mean I was, you know, I was covered in it. It was all over my uniform, it was on my hands, it was on my arms. I'm normally pretty careful about where body fluids go in relationship to my working environment but it was on the floor, it was everywhere.

Jane had never experienced this before, which contributed to her inability to frame the situation. Jane recalled the urgency of the situation and her lack of knowledge: "I couldn't understand you know, my knowledge didn't extend that far . . ." This lack of knowledge and the uncertainty surrounding the whole situation had a 'huge impact' on Jane, and resulted in a mixture of feelings from fright, anger, and confusion, through to frustration.

Although the impression might have been created that all past experiences contribute in a positive manner to the framing process of situations, this is not necessarily the case. Past experiences can also lead to habituated and ritualistic practises as is demonstrated in the event described below.

Betty, the nurse practitioner that shared an experience from the paediatric setting adds a different dimension to 'experience'. Although Betty maintained that experience is a major advantage when it comes to making decisions, her narrative demonstrates that those same experiences can also impose limitations on one's perceptions and actions. Betty recalled a specific event, in which she was approached by one of the junior nurses in the ward who spoke on behalf of the family. This particular micro-moment was labelled:

2. *The request by Robyn's family to have tea making facilities in the room*

Betty: The nurse that was asking me, I could see that she wanted to allow them to do it. You state at the beginning that it's not allowed, so these people knew it wasn't allowed, but they requested it after being told. Yet all of a sudden, after all these years of saying "no" to such

requests, something happens. She is a new nurse to the ward. She is very refreshing, she didn't have all the previous experiences that I've had with having to tell parents about the safety issue. She (the junior nurse) didn't quite have the same weight of the whole safety issue hanging over her. I felt, that's how I perceived it, she was just fresh you know, and she said: "Well, I know this isn't the rulebook but we'll just do it shall we? I'll just write it in the notes." I was thinking more of what we had done in the past. I was aware that I shouldn't be making decisions totally and completely just because I'd done it that way before. We are encouraged to give individualised family centred care, but the historical weight of past experiences can interfere with our perceptions and actions.

Betty's narrative is indicative of habitual practice, where little attention is paid, and little encouragement is given to nurses to question/challenge existing protocols and practises. Staff just followed the 'rules', until a new nurse arrived who looked with a 'fresh' perspective. Even though there might have been very valid reasons for banning hot drinks, the deeper questioning by the junior nurse, regarding firmly established protocols, created a gap for Betty where none had existed before. Betty talked about the dilemma she faced in regards to allowing this family a tea-making facility. She maintained that she could rationalise why this family should be accommodated in their request, yet she also knew that there were expectations 'out there': "... if only there weren't so many other people whose opinions mattered . . .", and: "Other people's expectations was the thing that we knew that we would be dealing with . . ."

Betty's case clearly highlights the powerful influence of experience, or more precisely of established practices and routines. Maintained and confirmed by institutionalised rules and guidelines, routines are likely to 'grow' into habits that weigh heavily on the shoulders of experienced practitioners. Betty's dilemma was not so much in regards to allowing or not allowing tea-making facilities as she indeed indicated herself. The gap Betty faced, and which she needed to bridge in order to move on, related to all the uncertainties associated with breaking the status quo, and how to deal with the potential fall out from colleagues who might perceive the situation differently.

GAPS

Although the exemplars above illustrate the use of framing as a strategy to make sense of situations, they also clearly indicate the variety of gaps nurses face in their day to day practice. In chapter 3 the concept of 'gap' was defined as a situational discontinuity, where human beings experience difficulties in making sense, and as a result see their further movement through time and space blocked. The factors that contribute to gap formation can be clustered into the following three main categories:

- Lack of information; Data available is not sufficient to recognise any patterns, especially in novel and never before experienced situations;
- Information overload; The person is unable to attend to all the information available within a short space of time, resulting in vital data being lost.;
- Insufficient knowledge base; Gaps can be the result because the person lacks appropriate propositional knowledge required to process perceived information.

Gaps are the result of any one, or a combination of the above categories, and can create feelings of insecurity and uncertainty within the individual. It is important to realise that gaps are quite common in ordinary daily life, because the social world in which we live, and the 'reality' we confront, is neither complete nor constant. Rather, life is filled with fundamental and pervasive discontinuities, which are part and parcel of the social contexts. In order to grow and develop in such a world, human beings are continuously required to produce and transform meaning into common sense and everyday 'knowledge'.

It has been argued before that human beings are meaning making individuals. If meaning making is fundamental to the survival of the species, then it is not too presumptuous to assume that the ability to eliminate gaps and create meaning is somehow a 'basic human need'. This in turn might explain why the realisation that the situation confronted doesn't make sense can result in the person becoming confused, and the accompanying sense of 'loss of control' contributes to feelings of unease, discomfort, anxiety, or even (mild) panic.

This study found that there was a direct link between the notion of gap and the experience of confusion. Participants confirmed that gaps produced confusions and distinct feelings associated with their inability to make sense of the whole situation or specific aspects thereof.

Confusions

For the purpose of this study confusion is defined as a state of bewilderment or perplexity. In such a state the individual is unable to see things clearly, to create order from disorder, to recognise the significance of the situation and create meaning for self.

Participants indicated that 'confusions' were commonly associated with a lack of understanding of aspects of the situation, and the uncertainties that were inherent in specific parts of the selected events. Thus confusions were more likely related to certain micro-moments rather than the entire event.

The literature suggests that reflective thinking assist in the creation of understanding and meaning making, by purposeful working through the uncertainties and instabilities that are typical of unique situations. By focusing in first instance on the confusions that arose from the disjunctions of such situations, this study attempted to gain insight into the reflective thinking processes utilised by the individual. The fact that all participants reported periods of confusion is in itself no surprise, as this study asked participants to recall situations that they themselves perceived as unusual or which they hadn't experienced before. The section below highlights some of the major confusions as described by the participants.

Exemplars of Confusions

Ann felt confused about having to take lying and standing blood pressures for a 'skin disorder', as she was unable to see the link between the two. At a later stage Ann was confused as to whether the situation she found herself in was 'real'. She was unable at first to determine whether her client was suicidal or was 'pulling her leg'.

Betty was confused in regards to the accusation by some staff members that her decision to allow Robyn's mother to do the routine observations had resulted in unsafe

practice. Clare was confused as to why the consultant was reluctant to treat her client and his absolute refusal to refer him to one of his colleagues. She was also confused as to why the doctor had said to the client that everything was all right when the ECG clearly showed abnormal patterns.

Diana struggled to find an explanation for her client's rigours. She became confused as her client had rigours, yet he wasn't as sick as she expected him to be. Ellen's lack of knowledge of caring for clients following surgical treatment resulted in her being confused about the 'normality' of her post operative observations. How much swelling could be expected and should this effect the mobility?

Fred's confusions were the result of unfulfilled expectations and role confusion. He expected his colleague to be capable of setting priorities and initiating appropriate actions. He did not expect an organisational structure that appeared to condone mediocrity. Fred expected to assist a colleague, but instead ended up being in charge of the situation.

For Gwenda it was very obvious that her client's condition was such that she was unable to remain in her own home. Because of her own findings she was confused as to why the doctor failed to see the need for her to be admitted to hospital.

Helen felt confused about the conclusions reached by the psychiatrist, that Ben was very capable to make his own decisions. The psychiatrist felt that Ben was not a danger to himself, that compulsory admission under the Mental Health Act was not warranted, and that he could go home if he wanted to.

Isabel's confusion related to the mother's underlying motives for objecting to a range of treatment options, and her abusive behaviour towards staff. Jane was confused as to the cause of the copious amounts of pulmonary oedema and the reasons for the poor performance level of some medical and nursing staff during the CPR.

In summary all participants experienced instances within their situation that they described as 'confusing'. Lack of understanding related to one's own role and responsibilities, the actions of colleagues and members of the multi-professional team,

as well as aspects of the clients' condition and/or behaviour, appeared to be the biggest contributing factors to the experience of 'confusion'. Confusion generally resulted in participants becoming unsure as to what was happening, and contributed to feelings of insecurity and doubt in one's ability to deal effectively with the situation. As a result of these feelings, participants experienced varying levels of stress.

The literature suggested that human beings have developed strategies, such as pattern recognition, perceptual categorisation, and framing, to reduce the occurrence of gaps, and to assist the species to create meaning in an ever-changing world. That these strategies are important for human survival and stress management should be self-explanatory. Within these strategies, language and self-questioning plays a pivotal role.

MEANING MAKING, REFLECTIVE THINKING, AND LANGUAGE

This study maintains that there is a strong link between the concepts and cognitive activities related to meaning making and those captured under the heading reflective thinking. For example meaning making was described as an intellectual human activity to manipulate experiential representations in order to understand and/or act in ordinary daily life. The drive to create meaning is stimulated when one is confronted with 'discontinuities' or interruptions in the 'natural flow' of things. Cognitive tools that assist in meaning making include the ability of humans to 'schematize' (Piaget, 1962), or as Bruner (1974) argued, the ability to perceptually categorise and stereotype events/situations/experiences. Dewey (1933) noted that reflective thinking was an effective strategy to create meaning. His description of reflective thought, and the associated cognitive tools, paralleled very closely those of sense making as described by the Sense Making method. For example, while Sense-Making referred to the concept of 'discontinuity' as the stimulating factor for cognitive action, Dewey believed very similarly, that reflective thinking arose out of situations of doubt and perplexity. Furthermore, Sense-Making maintained that developing understanding is a dynamic process, that once a person has made sense, the subsequent understandings and insights contribute not only to the person's perception, but also influence/alter that person's attitude toward, and relationship with, that particular situation. Similarly,

Dewey argued that reflection was a dynamic process that contributed to new insights and personal transformation.

The current literature on sense making and reflective thinking reveals many commonalities not only between both concepts, but also in regards to the tools used for both processes. Piaget (1929) believed that the ability to ask questions of meaning is fundamental to humanity. According to him, the process of focusing upon the unknown of human existence, and asking questions about it, begins in early childhood. As children grow, their environment expands and their experiences extend, and so their questions change accordingly.

Mandler (1984) stresses the importance of language for meaning making. She maintained that the framing of a situation/experience typically occurred in a narrative form. Mandler's study provided evidence that, if a situation does not get structured narratively, it suffers loss in memory. This finding adds a completely new dimension to the use of language, namely that narrative framing aids the task of memorising and recalling situations/experiences.

Jarvis (1987, p.56) maintained that when people experience an 'unknown', or disjunction, they are forced into a questioning position which is the starting point of the learning process. Hall (1989) placed a major emphasis on language, as he maintained that it is language that constitutes and dominates the social and cultural worlds of the human species. Hall argued that language determines the values, beliefs, and practices in any particular (cultural) setting.

Sense-Making too, assumed that humans engage in self-questioning when faced with a discontinuity, because of their need to create meaning in order to 'move on'. Self-questioning results in what could be called 'discourse' between self and the environment, between what is 'sensed' and what is known, and enables the creation of new meaning and understanding of the situation/experience. This study maintains that reflective thinking, like sense making, relies on language and discourse-with-self (internal 'conversations'), and more specifically on the use of self-questioning strategies. It is argued that practitioners, engaged in reflective thinking, are likely to

employ self-questioning strategies and that the exploration of question posing activities provides insight into reflective thinking as performed by the participants.

Questions, Questions, Questions

To research reflective thinking, practitioners were asked to select an event from practice that was unusual and thus likely to produce a disjunction. Placed firmly in context, participants were asked for their perception of the situation, including feelings, challenges, and confusions. Following on from this, participants were asked what they were thinking, what went through their mind, whether they had any questions or confusions. The concept of self-questioning for making sense of nursing practice was considered a key element in order to research reflective thinking. However, self-questioning should not be interpreted as people 'going round asking questions'. Neither should it be seen as the only type of activity people engage in when they are thinking. Rather, this notion of question posing refers to the person's ability to think coherently and rationally in a search for meaning, and more specifically the ability of self 'questioning self'. The Collins English Dictionary (1991, p. 1272) defined the concept of 'questioning' as followed:

Adj. 1. Proceeding from or characterized by a feeling of doubt or uncertainty. 2. Enthusiastic or eager for philosophical or other investigations; intellectually stimulated: an alert and questioning mind.

It is suggested that an examination/exploration of the types of questions practitioners 'produce' during situations of doubt and perplexity provides insight into the use of reflective thinking, as well as the focus of it. Furthermore, this study proposed that, self-questioning, or more specifically that the focus and use of question posing, is indicative of the level of reflection that practitioners were engaged in.

Question Posing

This study found that question posing occurred on a regular basis and was very common among most, if not all, respondents. Participants were thinking about the situation at hand, about what they perceived to be their reality. This thinking was interspersed with statements and conclusions, but also with assumptions and questions. Although it would have been interesting to focus on all these cognitive

activities, the current study restricted itself to those aspects that related specifically to self-questioning.

While most participants had no difficulties recalling the questions they were asking themselves, it is important to note that not all participants recognised at first that they did pose questions. For example, some participants could not remember being engaged in active self-questioning. They maintained that they 'only tried to find out', 'wanted to know', or 'just wondered why' without formulating, what they called, 'real questions'. When this was further explored, these participants were engaged in self-questioning but they did not think of it as 'questions' because they did not:

- ask the questions aloud;
- formulate what they called 'proper questions';
- label their thinking in terms of questions;
- think about their activity as posing 'questions'.

Some of the difficulties experienced by participants in regards to recognising self-questioning as a strategy for making sense, are illustrated in the two excerpts below. Isabel noted that she did ask herself questions, yet she also stated:

... but when I think about it, I am not at all sure that I ask myself all sorts of questions. I mean, do I ask myself questions? I have never thought about it consciously.

Isabel's comments demonstrated that the process of making sense can occur at varying levels of consciousness, and that people are not always aware of their own strategies while dealing with new situations. During two interviews Isabel demonstrated on numerous occasions that she engaged in self-questioning. The following example might serve as an illustration. Isabel mentioned that she wondered about the underlying reasons for her client's behaviour. When asked whether she had any questions in regards to that she answered: "No, I don't think so." When asked what she was thinking she answered that she: "... just wondered why her client ..."

Gwenda too experienced difficulties related to the recall of self-questioning, but like Isabel, she did ask herself questions. Gwenda maintained that, when you have got a lot of experience, the need to ask questions is reduced.

Gwenda: Well, asking yourself questions helps you make up your mind and helps you make sense of what's involved, and what needs to be done, I think. It is subconscious. I mean you've done it so long, yeah, been there and done that, and you just weigh it up. I don't know that I ask that many questions about what I could do and what I couldn't do or why I did it. Perhaps when I was first training I did ask many questions but now that I've been there and done most of the things . . . I'm aware that I think about the situation but I don't know whether I ask too many questions about it.

Responses such as those above are not extra-ordinary. Both participants, who have extensive clinical experience, noted that question posing might be something that occurs at a sub-conscious level and as such might elude the individual's awareness. This study supports their notion. Furthermore, it is unlikely that people, as a matter of routine, think about the processes involved in their own thinking while thinking. Indeed the tendency, so often displayed by human beings, to take things for granted must include and extend to the process of thinking itself.

To ensure a 'wide' approach to examining internal cognitive strategies for reflective thinking, the researcher most times asked three questions in one: 'What went through your mind', 'What were you thinking of', as well as asking participants whether they were posing themselves questions.

The interim analysis of the transcripts found that there was sufficient evidence of 'question posing' in the first round of interviews, to justify a more in-depth exploration. In the second interview extra attention was paid towards this phenomenon by examining the importance of self-questioning, the way in which this helped the participants to gain understanding, and lastly, how self-questioning influenced the decision-making process which ultimately influences nursing practice. It is these aspects that are addressed in the next chapter.

BARRIERS TO REFLECTIVE THINKING

The current study attempts to develop an understanding of how nurses make use of reflective thinking in an attempt to critically, yet creatively analyse and make sense of past and current experiences. It is assumed that exploring those factors that hinder or prevent a person from making sense also contribute to a better understanding of the processes involved in reflective thinking. Thus, participants were asked what aspects in the situation prevented them from gaining insight in the situation, or what prevented them from finding or getting answers to their own questions.

Exemplars of Barriers to Reflective Thinking

The narratives below reflect some of the participants' perceptions in regards to perceived barriers to reflective thinking. The excerpts are a collection of replies that related to a range of micro-moments rather than the event as a whole. In many cases the responses also indicate what would have helped the participants to overcome the barriers and grasp the full significance of the situation.

Ann: Probably the fact that I was considered a new graduate. Not knowing enough about skin conditions and probably not having the confidence to be assertive and ask the questions that need to be asked. I was scared when he started talking, I couldn't think clearly, as I had never actually been in this situation before.

Betty: Other peoples' expectations were the thing that we would be dealing with. If only there weren't so many other people whose opinions mattered. . . . solving the dilemma between what is desired and the institutional rules that need to be followed in principle.

Diana: Well I think it was because you're out of where you normally work, my unfamiliarity with this clinical setting. I didn't want to embarrass him by asking to have a look down below. . . . I had another couple of clients that I was dealing with, I didn't get long enough to talk with him because I was in and out every time . . .

Ellen: I lost my confidence due to a lack of knowledge of the area and not having the time to familiarise myself with the things. If only there was a care plan. If only the registrar had come to the ward and looked at it himself and reassured me. I had a knowledge deficit and it does take away the total confidence . . .

Fred: If only I had a better working knowledge of my environment. I didn't know what was wrong with the client, I didn't know who I was working with. . . . It was then that I started to ask myself those

questions but I still had another trauma to deal with so I couldn't ponder on that. I couldn't allow myself to become involved in those thoughts until I had done what I needed to do.

Gwenda: Cause I am only a nurse and he's a doctor, they don't like to be told. I mean even if I had been there he might have said: "Oh well, she doesn't need to be admitted."

Helen: The time pressures in the ward. I wasn't able to sit down for an uninterrupted time with him . . . I had four or five other people that I was responsible for . . . so there was this conflict going on of do I stay or do I go . . . The way nursing operates there is still a big barrier to spending head time with clients. The fact that there were no suitable resource-people available right there and then when I needed them. The psychiatrist wasn't in any mood to talk to anyone . . . There wasn't time to sit down with the members from the crisis team and talk to them at all.

Isabel: Her (the client) ability to communicate sanely with any of us. Perhaps my limited resources at this stage . . . It would have helped if the midwife had been present or some family member.

Jane: Time. Yeah, just the time factor. If I had stayed longer I could have seen some pattern developing with his respiratory system. If I had had a registrar who knew her stuff, I would have felt comfortable in saying: "Hey, what's going on here?" The relationship with the registrar, her feeling of discomfort you could just tell. The urgency of the situation. My lack of knowledge, I couldn't understand . . .

From the above excerpts it can be concluded that there were a variety of factors, both internal and external, that hindered participants from understanding their contextual situation.

In regards to internal conditions the following elements were identified:

- lack of theoretical knowledge mostly related to the client's condition;
- lack of confidence in their own knowledge base and abilities;
- not having experienced a similar situation before;
- being scared of the situation to such a degree that it inhibited 'clear' thinking and the ability to 'stand back' and look at it;
- perceived expectations of others, especially peers;
- the perceived lack of time to sort things out.

In regards to external conditions the following elements were identified:

- the speed at which certain situations developed from one stage to the next;
- the complexity of some situations which required practitioners to choose between client needs and organisational/institutional requirements;
- the reality of a large workload that does not allow easily for the allocation of a disproportionate amount of time for one client only;
- the reality of workforce planning at times necessitates that staff are placed in unfamiliar clinical settings;
- the unavailability of senior staff, resource staff, and/or medical staff at certain times of the day/night.

SUMMARY

This chapter focused on the role and use of experience in clinical practice. While Benner (1984) maintained that experience was important for the development of *expertise* in nursing practice, the findings in this chapter indicated that experience played an even more vital role. Previous experience takes the 'foreignness' out of situations and contributes to the individual's increased potential to recognise or discover patterns that facilitate perceptual grasp, and allow the individual to respond more rapidly. The research showed that reflective thinking is important for 'intelligent' nursing actions, for actions based on clear rationale. Inability to make sense of the situation led participants to feel at a loss, to experience a gap that prevented them from doing what needed to be done. The accompanying feelings of unease, discomfort, or anxiety in turn became the triggers for reflective thinking.

This study found that participants did engage in discourse/dialogue with self. Internal conversations and more specifically self-questioning, were important aids to making sense and contributed to one's understanding of the phenomenon. Although some participants indicated that they were at first not fully aware of using self-questioning as a strategy for sense making, their narratives demonstrated plenty of instances where this strategy was used effectively.

CHAPTER SIX

THE USE OF SELF-QUESTIONING IN REFLECTIVE THINKING

INTRODUCTION

Life is filled with fundamental and pervasive discontinuities. To create meaning in such a world is a basic need in order to grow and further develop as human beings. People need to create meaning to be able to act appropriately within a situation. Equally nurse practitioners need to create meaning in situations of doubt and perplexity in order to be able to deliver appropriate care, as well as grow professionally.

Dewey (1933, p. 230) noted that: ". . . while language is not thought, it is necessary for thinking as well as for communication." Mandler (1984) too stressed the importance of language for meaning making, especially as it related to memory and recall of experiences. Hall (1989) saw the institution of language as the dominant factor that determines values, beliefs, and practices.

The current study confirmed the importance of language in the cognitive process that is known as reflective thinking. The analysis of 59 micro-moments found that participants engaged in self-questioning in order to clarify and make meaning of a given situation. Self-questioning, as used in this study, refers to the human ability to engage in discourse-with-self in times of doubt and perplexity, while assuming the existence of the human desire/need to make meaning and create order.

Information is seen as something that is always linked to human behavioural activities. Therefore, any study that examines how people process information should include not only an exploration as to how people make and use their constructings, but also how it effects their actions.

The focus of this chapter is on discourse-with-self, or more specifically on self-questioning, the type of 'questions' participants generated in the course of a specific event. As mentioned previously the term 'questions' in this study refers to the cognitive activities that were the direct result of doubt and uncertainty. It is suggested that the nature and focus of the questions generated are indicative of what participants perceived to be their 'reality'. Reality in this context refers to what the nurse perceived to be his/her understanding, priority, responsibility, as well as their perceived role within the unique nursing situation. Furthermore, this chapter explores how information, gained from self-questioning, helped (or hindered) the participants' movements through the situation, and how it contributed to new or better understanding. The following questions were developed to explore this aspect:

- What conclusions did you come to as a result of the experience? What have you learnt?
- How did the outcome of this experience connect to, or influence your nursing practice?
- How did the outcome of this experience connect to, or influence you as a person?

As many participants had verbalised discourse-with-self in a question posing 'style' the following three questions were asked during the second interview:

- How important were the questions you were asking yourself?
- How, or in what way did these questions help you? Or
- How did these questions help you to make decisions?

The responses to these questions allowed for a deeper exploration of the 'uses' aspect of self-questioning. Lastly, participants were asked what they had learnt from the situation/event since their last interview.

TYPE AND FOCUS OF QUESTIONS

Reid (1993) maintained that 'reflection' is a process cycle which focuses on the description of the event, the associated feelings, an evaluation of the experience, the analysis of the experience in order to make sense, followed by reframing the event to consider alternative actions. Reflecting on the experience, Reid argued, can inform the practitioner in future events, contributes to constant monitoring of nursing actions, and influences practice because it questions why certain outcomes occur.

The second interview focused particularly on those micro-moments where participants engaged in discourse-with-self. Thus participants were asked why they engaged in self-questioning and what benefits respondents believed to gain from this activity. The latter question was very relevant as some participants had earlier indicated that they didn't expect any 'answers'. It must be self evident that the type of questions participants asked themselves depended entirely on their perception of 'gap', and their perception of the micro-moment as it related to the whole experience at the time. It is argued that analysing the type of questions that practitioners asked themselves will also reveal the focus of their reflective thinking in clinical practice.

Exemplars of Question Posing

This study found that self-questioning was first of all a strategy to prepare oneself for things to come. For example, after listening to the morning report, Isabel prepared herself for her first meeting with Karen by asking: "How am I going to get through to this mother our reasoning for the treatment of her baby, and what if . . .?"

1. The initial contact with Jimmy and Karen.

Isabel: To me these questions were quite important. I worked out how I was going to do it, how I thought I might do it, before I actually walked into that cubicle to meet the mother and the baby. I had established my train of thought in my own mind first, of how I thought I would try handling it first, and then I sort of had several other things that I could fall back on if the first option didn't work out. So I asked myself, why was she reacting like this? Was it her concern for the baby? Was it because of her concern for the rest of the kids at home? Was it that she didn't like hospitals? All those sort of questions were

running through my head. I had to sort of explore a little bit to see if I could find out why she was reacting like she was.

As can be seen from the above exemplar, engaging into a questioning dialogue with self allowed Isabel not only to develop a strategy of care, but it also enabled her to explore alternative approaches in case the chosen pathway was unacceptable to the mother.

Diana used self-questioning in a very similar fashion. She needed to decide whether a doctor was required to examine her client. In her questioning mode she went through the things that she thought were expected of her as a nurse, prior to phoning for assistance. Diana believed that her discourse-with-self enabled her to go through a mental 'tick-list' of 'have done and still to dos', as well as preparing for possible doctor's questions. Below is her dialogue during the fourth micro-moment:

4. Diana decided to inform the house surgeon regarding her client's condition.

Diana: I guess, like I said earlier, you need to be fairly confident that they (the doctors) truly do need to come and see this patient, and you need to know just how sick they are. I was thinking whether or not I should be having a look, what else there was. So all those questions run through your mind and also previous experiences. Yeah, questions are important, I think that's part of nursing. It helped me feel more confident about ringing the doctor I guess, knowing that I'd run through most things in my mind so that I knew that I would have the answers. You need to be able to think of a whole lot of things and those questions helped me and just confirmed that he (the client) did need seeing.

Clare found herself in a position where her client ('Peter') was denied a second medical opinion. Peter was extremely unhappy and shared this with Clare. Although Clare 'knew' that clients had a right to ask for a second opinion, the adamant response from the consultant 'threw' her and caused doubt in her mind as to whether all clients have always, and under all circumstances, the right to a second opinion. However, most of her questioning at this stage concerned her own mental preparation for the potential consequences of her actions in regards to herself:

Clare: Well I had to ask myself: "Do all clients have a right to a second opinion? Is he going to tell me off? Is there a good way to

approach it? Will he growl at me?", that sort of thing. It makes you go through a sort of thought process really. I was concerned about the consultant's response. I was trying to work out what I would say and how I would approach him in a way that he would respond positively. It made me think and it made me answer my questions and then it made me build up more questions and more answers. I suppose I was reassuring myself. If you suddenly go into something without thinking about it then there's going to be problems isn't there. I like to think about things before I go into it, so I've got the answers, know where I'm at.

The above dialogue of 'self questioning self', guided Clare through a rather complicated situation. It enabled her to assess the risks inherent in openly disagreeing with a doctor's decision and prepared her for 'eventualities' by running through some possible courses of action in order to select the best option, as well as 'bolster' her for the things to come. Clare's dialogue resulted in the third micro-moment:

3. The decision by Clare to phone the second consultant.

As these narratives indicate, all three participants engaged in self-questioning to help them prepare for the eventualities of the situation. Isabel knew from the report that her client was critical of the care provided thus far. Isabel prepared herself for her client by thinking ahead about alternatives, and by asking herself what the best approach would be, given the circumstances.

Diana mentioned that self-questioning helped her to feel confident that she made the right decision in calling the doctor. She was well aware of the hierarchical power structure within the current healthcare delivery system, which require nurses to continuously balance the 'requirements' of the medical staff with the needs of the clients. The seriousness of the client's condition was carefully assessed in order to ensure that the doctor was not 'needlessly' called upon as this could have negative repercussions for her.

Clare's narrative is a good example of calculated risk management. She appraised carefully her client's and her own position. Once she had concluded that all clients had a right to a second opinion, she assessed the potential consequences of her actions while working out some alternative strategies.

Self-questioning was also used extensively by the participants to assess the correctness and/or appropriateness of their own actions. This study found that such discourse-with-self was not restricted to junior or less experienced nurses only. Experienced nurses too, frequently reassessed their actions as the following excerpts demonstrate.

Helen was confronted with a situation where her client announced very calmly, but 'out of the blue', that he was going to go home. This event was Helen's third micro-moment:

3. *Ben's intention to discharge himself even though his medical condition was still unstable.*

Helen: . . . those questions were all internal, but the basic underlying tenant was, have I done something that has precipitated this situation? Have I actually missed something with this man? Have I inadvertently caused him offence or have I not met a need in some way? I was looking very much at, is it my fault that this situation has arisen? I did a quick review of my interactions with this man. I couldn't see anything that may have precipitated this situation so that was quite good. I figured I came up reasonably squeaky clean.

Isabel, like Helen, is a very senior nurse with many years of clinical experience. When the function of self-questioning was explored, she too mentioned that it enabled her to monitor her own performance:

Isabel: It (self-questioning) helped by defining for myself, that what I was doing was best for the baby. Going over all the options that were available and clarifying the situation in my own mind more as: "Was I doing the right thing? Was there anything else that I hadn't thought of that might suddenly come to light? Was there any other thing that I had used in the past, and that I hadn't remembered but that I could perhaps try again?" I kept reminding myself that I had to be very patient and keep cool. That's why I kept asking myself questions to reinforce, yes I did have to be.

Ann, a junior nurse with two years experience, reflected on the correctness of her actions earlier in the evening by adopting a questioning stance towards the events

while she sat with her client Chris. Below is her dialogue that occurred during the sixth micro-moment:

6. *The need to restrain Chris in order to ensure his safety.*

Ann: Just sort of trying to get that information. I wondered whether I was actually doing the right job of actually getting that information or whether it should have been someone else trying to get that information out of him. I also wondered whether I should have actually left him alone when I went off to tea.

The next excerpt relates to Betty's fifth micro-moment. Betty had allowed Robyn's mother to do the observations on the child herself. Some time after that decision was made Robyn was said to have behaved differently 'all day', yet the nursing staff had not noticed it. When staff did become aware of it during the p.m. duty, they blamed it on the fact that nurses were no longer involved with the routine observations. This situation led to the fifth micro-moment:

5. *The comments by some staff members that Robyn's safety was jeopardised.*

Betty: They said: "Someone said the mother could do the observations", and so I did own up to that and said: "Well that was me." I explained why, but I felt in a very vulnerable situation. I had to question myself whether the decisions I had made had led to this child being placed in an unsafe situation. I had to be sure in my own mind that I had made the right decision in the first place. If something goes wrong the decision-maker gets blamed because they made that decision whether it relates to it or not. By asking myself these questions I made a decision, I guess based on previous experiences, and the way that I'd thought things through before. So, in asking myself those questions I'm just working it through. I'm working through what the options were and justifying, very aware of the medical/legal side of nursing, asking myself was it a safe thing to do. Yeah, by asking these questions you're just clarifying in your mind what your decision was. You can't reach a decision without asking those questions.

The interviews revealed that self-questioning strategies were not solely restricted to 'unique' or confusing situations. Participants did ask themselves questions, even when the situation was perfectly clear to them, as is demonstrated in the next narrative concerning Betty during her second micro-moment:

2. *The request by Robyn's family to have tea making facilities in the room.*

Betty: It was pretty obvious and I wasn't really confused. I could see exactly what they wanted and why. It was more the ramifications that I was considering. How would nurses, who weren't there to make that decision on that spot and at that moment, respond when they realised that these people were having hot drinks in the room? How would they respond when they go into the room, find all this stuff there, and find it written in the negotiated care plan? Basically the questions were how do we resolve this and please as many people as possible. If you're going to make a decision that you think is going to be acceptable to as many people as possible you have to consider all those other people involved so, that's how I think the questioning helps.

Jane was confronted with a situation where she felt that her client should be intubated. She tried to discuss it with the registrar she was working with, but the doctor didn't respond to her request. Jane brought it up again and this time the registrar responded 'vaguely' and appeared unwilling to carry out the intubation.

5. *Alex requires intubation*

Jane: I guess they (the questions) pushed me, because I couldn't understand why she didn't want to intubate him. Again I was asking the questions that I didn't have the answers for, but they helped me to keep pushing for it. I knew that once we got him intubated, at least his airway would be manageable. Airway, breathing, circulation, we had none of the first two, and the third was dropping off, so it just made common sense to me to get an effective airway, so I guess that the questions helped me to prod her.

The above narrative is interesting in the sense that Jane was thinking about possible reasons for not intubating Alex. Because she couldn't think of any valid reasons for not doing so, she felt strengthened to keep asking for intubation up to the point where she told the registrar to intubate Alex, or she would do it herself.

This study found that self-questioning did not per definition result in a positive outcome as far as meaning making was concerned. Participants did report occasions where self-questioning did not contribute to increased understanding as demonstrated in the following narratives. The first one relates to Jane during her fourth micro-moment:

4. *Jane is involved in the second resuscitation on Alex.*

Jane: Well, they (the questions) didn't (help), because I couldn't answer those questions at the time. I couldn't find the answers. Why was this 44-year-old man, who on first appearance looked so fit and healthy, why was he so poor to respond to treatment? I couldn't get those answers because we had no history, he was just a straight presentation. So no, that question didn't help me and it only made things more frustrating. I kept feeling that we were missing something because, if he was fit and healthy, he should have been responding and he wasn't. The obvious answer was that he wasn't fit and he wasn't healthy.

Helen too, noted that there are situations where self-questioning did not contribute to increased understanding at the time of the event. However, Helen mentioned during the second interview that she was still thinking about the situation. Delayed understanding as a result of continuous self-questioning and 'mulling over' might still occur.

7. *The findings from the psychiatrist that Ben was capable of making decisions for himself, including self-discharge.*

Helen: Initially they (the questions) didn't help, they just confused the issue more because I couldn't see I couldn't get a good picture and I went round in circles but then slowly, I could see what was happening in taking this step back and looking at it, and at what was happening with him. All the questions that I had just seemed to raise more and more questions. I had no answers for them and I still don't.

All narratives provided thus far give the impression that the only goal of self-questioning is to make sense of, and/or to (better) understand, a specific situation. While this holds true on many occasions, the strategy can equally be used for something quite different as can be seen in the following narrative.

Ellen was asked to care for a client who was still in operating theatre. Not knowing what was required in order to give appropriate care following surgery, and not being able to access the information she needed, Ellen engaged in self-questioning for a different purpose.

Ellen: To be honest, I was thinking a lot about how to get out of that ward before she comes back from theatre. What are the chances that I could actually forestall going down for her. I knew about half nine that she was coming and I thought: "Now come on, if she stays in theatre long enough you won't have to look after her therefore you won't have to put yourself through this." My main aim was to get out of that ward about half ten, eleven o'clock and hopefully while she was still in theatre. Avoidance really.

The behaviour Ellen displayed is known as cognitive avoidance (Marks, 1987). The phenomenon of cognitive avoidance has long been recognised by behavioural therapists as a strategy in the context of anxiety and general threats to self-esteem. Sundeen, Stuart, Rankin, & Cohen (1989) noted that avoidance tactics attempt to preserve the integrity of the self by limiting the awareness of the experience. Later that duty Ellen received a phone call from operating theatre that her client was ready to return to the ward. Avoidance was no longer possible and Ellen had to face the situation in her fourth micro-moment.

4. The client arrives from theatre.

Ellen: I think the more I asked myself the more confused I got. The more I asked the more I realised that: "Yes, my knowledge was very much lacking in this area." I think, as I've said, on the medical floor you've the medical registrar who will come up and tell you: "This, this, and this is going on." In this case the orthopaedic registrar didn't come. He had sort of passed his patient on and he was out of there. I suppose that should have reassured me that everything was all-right otherwise he would have come.

Overall self-questioning, as a cognitive activity, was frequently used in a wide variety of situations in an attempt to make sense. The majority of narratives demonstrate that self-questioning was extensively used in all those micro-moments where participants were confronted by gap-producing situations that prevented them from 'moving on'.

In terms of time-focus, self-questioning centred almost exclusively on the 'here and now'. This study found that self-questioning most frequently focused on eliminating gaps involving:

- The client; The major questions related to the clients centred on the *nature of the situation* i.e. What is wrong, or what is happening with my client? and/or the reason for the situation/condition i.e. Why is my client...? The 'when and where' questions which focused on the timing or location of the event were far less often used in self-questioning.
- Self; The major questions related to self centred on the *procedures or skills required* to continue the journey i.e. How am I going to deal with this? Am I doing the right thing? Where to from here? Self-questioning served mainly to prepare for *action* and to a lesser degree to monitor and evaluate one's own performance and knowledge base.
- The system; The major questions related to the system centred on *the availability of* human resources, the availability of support systems, and the physical environment insofar as these relate to moving from one time-space to the next.

PERCEIVED BENEFITS OF SELF-QUESTIONING

Participants were asked in what way self-questioning contributed to, or hindered making sense of, and learning from a situation. While some participants recalled situation during which self-questioning was of no help to them, none mentioned a situation in which self-questioning hindered or impaired sense making. Each time when respondents did indicate that posing questions assisted them, they were asked to describe or explain how, or in what way, they believed it was helpful.

All participants had very clear ideas about the advantages of question posing. Be that as it may, the benefits of self-questioning were not equal for all micro-moments in terms of helps or hinders. Participants were least likely to engage in self-questioning in those micro-moments that were more or less perceived as 'connecting moments'. It is also important to note that the underlying purpose of self-questioning depended entirely on the participant and the context they perceived themselves to be in.

The responses below reflect the participants' perceptions in regards to the benefits of self-questioning. The excerpts are a collection of replies that related to a range of micro-moments rather than the event as a whole.

Ann: How do these questions help me? They probably don't help in the initial stages. I suppose first of all you have to answer some clarifying questions to be able to understand why the whole situation is happening. Hopefully that gives you some insight into the situation and eventually you end up with the whole picture. . . . I believe nursing is about asking questions about each situation. When you're asking questions you're either unsure of the situation or unsure of the answer or sort of reconfirming with yourself that: "Yes, I am right", or: "No, I might be wrong here, I need to get some more clinical base line data." . . . So yeah, I believe that, if you're not prepared to ask questions either from yourself or from other colleagues, you can't go very far in nursing, really learn from your nursing experience and have that practical knowledge base. If you are prepared to ask yourself questions and if you answer them then, you know, that goes in the back of your mind and somehow it sort of comes out again later on if a similar situation arises. The question might be slightly different because you've already got the answer that you'd already asked yourself previously. . . . Asking questions is also about reassuring yourself that: "Yes, I am doing the right thing."

Betty: Well, I don't know really. I guess that somehow they (the questions) help me sort things out, clarify things. . . . I think they help me to decide what to do next. . . . Asking myself those questions in my head, whether I was aware that I was asking them or not, helped me make the decision. In asking myself all those questions I was running through my head the other possible scenarios and thinking what the ramifications would be for either side of my decision. . . . I wouldn't be able to make a reasonable decision in my mind, if I didn't think things through based on those questions. You can't just automatically say: "Oh yes", and not ask yourself questions. By asking myself these questions in my head, quickly running it through, I made a decision.

Clare: It makes you go through a sort of thought process really. It made me think and it made me answer my questions. It made me build up more questions and more answers, and I suppose I was reassuring myself. . . . If you suddenly go into something without thinking about it then there's going to be problems isn't there? . . . I like to think about things before I go into it, so that I've got the answers, or at least know where I'm at.

Diana: I think the questions helped me clarify in my mind whether I had done everything I should have done and I wasn't just going to waste the doctor's time. . . . I guess they (the questions) help prioritise

everything and they help with my time management as I find out who's the sickest patient and mentally run through what they need doing. . . . So all those questions that run through your mind and from previous experiences, yeah, it just helped me clarify things.

Ellen: For me when I questioned myself, I suppose it structures my thought processes as to where am I going, you know. I think the more I asked the more confused I got. The more I asked the more I realised that yes, my knowledge was very much lacking in this area (surgical). If I had given the answers to my own questions I probably would have thought: "Oh I do know something here." . . . I may have got a bit blasé where as I say the more I asked the more I realised how little I knew and the more acutely I watched her to make sure that she was okay. So really, I was a heck of a lot more observant than I would have been had it been something I knew about.

Fred: The questions that I ask myself in these situations help me to come to certain decisions in regard to the tasks that need to be performed. The questions that I ask myself do two things: firstly they remind myself of what the tasks are that need to be done, and secondly, whether or not these tasks can be achieved. . . . The questions that I asked myself didn't make any sense of the situation at that time, but it allowed me to try and deal with the situation in my head. From a practical sense they didn't assist with what I was doing at the time. They were helping me to come to some conclusions about Carol's limited ability to care, the managerial decisions that were made in placing Carol in an area without having the required knowledge or skills. . . . The reason why I asked those questions to myself was because I wanted to see some resolution to what had happened. I ask myself these questions as I felt initially that the accountability lay with me. I wanted to reassure myself that I had done all that I could have done and that I performed to the fullest potential in the given situation. . . . So the questions that I was asking myself was to try and offer some justification to myself that I had done the right things. I think, in any given situation, you always question yourself: "Did I do the right thing?"

Gwenda: Well, you don't come to an answer unless you ask a question do you, so you had to sort of ask yourself: "How are we going to do this?" . . . I don't know, I think it (self-questioning) helps you to think logically. If you start asking questions you've got to work out, pick out, ways of doing. So, you have to ask questions but I don't know how they helped me. I guess they helped me clarify and come to a conclusion of how best to do it.

Helen: It's my way of clarifying the issues in my own head. I don't actually necessarily ask these questions out loud, they just run around inside me. These questions are an integral part of my nursing practise and it's just my way of sorting it out in my own head what's happening and if I come up with more questions than I started out with then I

know it's time to go and get some help. . . . They (the questions) are very important. They are pivotal to the whole situation, because you're grappling with the question of: "Is this man in his right mind, is he going to care for himself, or is he going to do, as he said yesterday, and not care for himself." . . . I had to put all the whys, wheres, hows, and whats aside at the time, and deal with what was happening. I am still unclear as to how one person can interpret something as a totally irrational act, while another person considers the same act to be completely rational.

Isabel: Perhaps they (the questions) always make you feel a bit better in that you are exploring all options and avenues. . . . When many different ways are needed these questions are very essential. I must admit, I am more aware now that I am asking myself lots of questions all the time but it had been very subconsciously, I never thought of them before as questions as such, it is just, you know, my method. . . . Going over all the options that were available and clarifying the situation in my own mind: "Was I doing the right thing? Was there anything else that I hadn't thought of that might suddenly come to light? Was there any other thing I'd used in the past that I hadn't sort of remembered that I could perhaps try again?" . . . By perhaps just defining to myself that what I was doing was best for the baby. That's why I kept asking myself questions.

Jane: I guess it categorised things if you use it as a learning experience. . . . I think I had more questions than I had help, because I couldn't figure out why he had cardiac arrested, why the nurse wasn't functioning properly. . . . The questions I had were: "Am I going to manage?", and: "Is it going to be successful?" I think that those questions are the same for me every time when I go to an arrest. . . . The questions, I mean, were glaringly obvious, that's why you ask them. Just the fact that you don't have the answers to them doesn't make the questions any easier or make them any more helpful. I don't know what it does, you can ask the question, but at that stage I wasn't going to get any answers. . . . You ask questions to get answers, it's just a human nature thing, inquisitiveness. But there are some answers that you just can't get, that's human nature. . . . I see myself as a really senior nurse, and I see myself practising at that level. Maybe I'm there because I do ask questions and I do look for the answers, even when I can't find them. I believe I try to use every experience as a learning experience.

In summary, the following contributions and benefits of self-questioning for the purpose of sense making were repeatedly claimed by the participants in this study:

- It helped participants to clarify and categorise situations and events, and contributed to their ability to think 'logically' and set priorities;

- It assisted the structuring of thought processes and reduced the possibility of 'overlooking' important aspects within the event;
- It helped participants to make meaning of the situation, to understand what was going on;
- Taking a questioning stance enabled participants to 'think ahead', to pose and redress potential problems before they occur, rather than solve problems;
- It assisted participants to clarify for themselves their role as well as their responsibilities within the wider context of the situation;
- It reassured participants that they were on the 'right track', or warned them to be more vigilant or ask for additional assistance.

Self-questioning contributed to increased meaning making and as such effected directly the nurse practitioners' response to the situation. Self-questioning contributed to increased understanding of the different aspects of the situation, and enabled practitioners to make informed decisions regarding the 'right' course of action. It made practitioners look at themselves and question those things that they otherwise might have taken for granted before.

The variety of nursing experiences and situations described by the participants of this study confirmed that nursing is indeed unique, and that practitioners are required to, what Schön (1983) called, 'think on their feet'. This thinking included such things as:

- assessing the situation;
- generating potential solutions;
- examining and comparing potential solutions;
- selecting the most appropriate solution for implementation;
- evaluation of the post-intervention situation and one's own performance.

The narratives overwhelmingly demonstrated that the participants' interactions with clients, as well as their nursing interventions were influenced by self-questioning. Within the study sample, question-posing appeared to be an important component of reflective thinking as it increased awareness and understanding of the nursing context, which in turn effected the nursing care provided at the time. What has not been

examined at this point however, are the indirect effects of self-questioning. It is these aspects that I will turn to now.

Long Term Benefits

So far this study has mainly discussed the immediate effects of self-questioning as it relates to making sense of the nursing situation at hand. However, as discussed in the introductory chapter, the nursing literature claims that there are also positive long-term effects related to reflective thinking. For example, reflective thinking was seen as essential for experiential learning and for improving one's clinical competency. Reflective thinking was also said to contribute to new theories of nursing, professionalise nursing, as well as empower nurses.

This section examines whether there was any evidence in the discussions with the participants that is indicative of a more 'lasting' or permanent change in perception and/or behaviour as a result of reflective thinking. Participants were asked whether they had come to some sort of a conclusion and/or whether they believed they had gained or learnt something from the situation, and how this might possibly effect their future nursing practice. Participants were also asked how they saw the outcome of the experience as it connected to, or influenced them as individual persons.

It was noted that most participants experienced difficulties with this part of the interview. One explanation might be the fact that, although the interview questions had continuously centred on the participants' experiences, beliefs and perceptions, participants were still able to describe and discuss the event as if they were 'looking in from the outside'. This stage of the interview required them however to look only at themselves as (professional) nurses and as individuals. The focus was thus completely on the participants *themselves* rather than the events, and on whether or not they gained new insights and skills in 'things' nursing, and how, or in what way this new knowledge contributed to their future nursing practice, and/or benefited themselves as individual persons.

The exemplars below focus on perceived benefits gained from the entire experience, even though some narratives might refer to specific micro-moments within it. The

second part of the excerpts relates to the effects the experiences had on the participants as individuals.

Exemplars

Ann: As a nurse it probably made me more comfortable in dealing with crisis patients, being able to sit down, talk to young teenagers, and get that rapport up. My confidence is slightly higher than what it was before this situation. That's probably my main gain. . . . I'm probably more aware now that perhaps anyone that comes in as a patient could have underlying tendencies to harm themselves even though they might not have come in for that particular reason. It has also increased my awareness of the importance of family dynamics. When you've been brought up in a stable family environment you think everyone's like that, but when you care for a client like Chris you realise that you shouldn't take that for granted.

It did affect me as a person in that it took me ages to forget about it, not to have it at the back of my mind every five minutes of the day.

Betty: Maybe not so much learning but it has reinforced that there is no right, necessarily no right way to do anything. Every decision you make has to be taken in the context in which it occurs, the family involvement, the illness of the child, and the child's developmental level. There is no right answer and you are never going to please everybody but you still have to ensure above anything the child's safety and your ability to observe them, those are the two main things that was involved in this kind of decision. . . . What I have learnt are things like you have to always remain calm and keep your mind wide open. You always have to consider your patient's best interests and in our ward patient and family's best interests. People have got different levels of experience and different interpretations of how they want to give care. We all give care in different ways and we have to be open-minded and mature enough to accept other peoples' decisions and work with them. I think it just adds to the strength of your practice because it gives you another experience to base your practice on. It extends your practice because you're enriched by other peoples' opinions and experiences.

I suppose it helps to develop as a person. Anywhere you are going to deal with people you are going to have to learn these kind of lessons. The open-mindedness, accepting other people's opinions, you can't just be narrow-minded and think there is only one right way. At the time it gave me quite a lot to think about, I was thinking about it out of hours as well as at work. I guess your work life is part of your private life because it impinges on it because you take the thoughts home with you and it reflects on it in that sense but I think that it all goes toward life experience really.

Clare: One of the conclusions I came to was that this doctor doesn't actually have a great deal of knowledge about the cardiac side of things. I would possibly not trust him again when it came to another patient who wasn't so well. I learnt not to sit back and get walked over by doctors. Yeah I sort of learnt to be more assertive when it comes to that sort of thing. Stick up for my patients. I think it made me a bit of a stronger nurse, a stronger person. I'm usually confronting the doctors more often now. I certainly look out for the patients a bit more now. Being an advocate which is something that I don't think we do near enough of, we all just sit back and let the doctors do and say as they wish and it's not right.

I do think about that incident quite a bit. It did affect me quite a bit at the time I was really frustrated about it but I feel happy about it now. I feel stronger as a person.

Diana: I learnt how important it is to have a positive frame of mind. If I just think more positively, everything goes easier and everyone is more helpful, friendlier, and you feel more comfortable as a nurse but also as a person. I don't need to get so stressed because it is not as horrible as you first think. Being more positive in your approach certainly helps. . . . I learnt about the importance of MSU cause that just didn't come to mind at all. When the doctor asked for it I thought: "Oh yeah I'd forgotten that one on my little list in my mind."

Ellen: Being transferred to a 'strange' area, I became acutely aware of my own knowledge deficit. I think I also became more aware of the needs of casual staff when they come to our area. I realised that there is a definite need for people to come into our area when we're not busy to familiarise themselves with the environment. I would like to see more orientation in different areas to get away from that fear, that total helplessness when you walk in as the new nurse. . . . The experience has changed me in that I'm probably a lot nicer when casual staff come to my area. I try my best to ensure that they're given an orientation and that they feel that I appreciate their help. I am more likely to sort of buddy rather than say 'here'. . . . Other than work, I don't think it really affected me. I have always lacked confidence when I'm in a unfamiliar environment, I don't think that's going to ever change.

Fred: The conclusion that I came to when I found myself in this situation was that I had to take charge. It was my responsibility because it was obvious to me that the nurse that was looking after this patient wasn't able to do it properly. Another conclusions that I came to was that the clinical area isn't as well organised as it should be. . . . I've learnt a couple of things. I learnt that you can't always rely on

other people to be effective, and in this situation I went in to help out when in actual fact I had to take charge. . . . Not only did I learn from that experience where things are, the physical lay out, but I also learnt how I felt inside, so if I feel that again I may know how to act. Do you understand what I mean? It's not just about knowing where things are but it's knowing that feeling and not getting scared of it, the adrenaline rush. It is 'knowing myself', how I respond, how I behave when somebody gets a cardiac arrest right in front of me. I have learnt in so many ways to deal with certain situations. One of the things that's come out of this is that I've actually gone down to A & E and orientated myself to the resuscitation room because I don't want to be in a situation again where I don't know where things are. I don't want to be in the situation where I'm shouting for help and I don't know the peoples' names. I think that I have identified some problems and tried to see how I can make sure that they don't happen again or that similar mistakes aren't made again.

As a person it made me evaluate the place that I work in. In my private life I think a lot about what I do as a job and as a result of this situation it's made me think: "Well, am I actually working in the right place? I may be doing my job properly but the people I work with I can't rely on. Is this good for me, could I end up in a situation where, as a result of other peoples' mistakes I get the blame?" It is difficult to draw a line between professional and private life.

Gwenda: Well, I think I'd do the same again if I were in the same situation. What I have learnt? Well, to a certain extent yeah, where I feel that if I can possibly help I will wait for the doctor if I can, I think I would try and arrange to meet with him so I can put my point of view across, but it doesn't always work that way. Personally I was disappointed that he hadn't admitted her. I felt that nursing wise my own gut feeling was the right one so I felt good that my expertise was up to what it should have been.

What have I learnt at a personal level? That's a tricky one. I don't know. I've learnt that I don't always get my own way. I've learnt that not everybody thinks the same way as I do. Not every doctor is the same, not every doctor looks at the whole picture I think.

Helen: My conclusion was that I needed medical input. My gut feeling was: "This doesn't marry, he's just going to go home to stop his insulin and he'll either end up dead or railroaded back in again." . . . I learnt that nothing is ever as it seems, ever. You go along in all aspects of your life making assumptions but they may be absolutely poles apart from 'reality'. Don't ever assume that you know what is going on inside the people you care for because you don't! It rammed home for me the importance of being able to sit down uninterrupted and talk with your clients. I think that the thing that's really reinforced is that

you mustn't become complacent about your work. It reiterated that need of looking at the whole picture. . . . I guess I also learnt that the resources that you need are not that readily available, they're very thin on the ground. You really are left to deal with it yourself and if you haven't got the depth of knowledge, or that particular skill, or that degree of insight it has the potential to work out very wrong for both yourself and the client. . . . I don't think this experience has changed my nursing practice, apart from raising my awareness about the Mental Health Act. I actually need to learn for myself a bit more about the workings of the Mental Health Act, so that I can understand better how the decisions are arrived at. I don't know that there is anything that I did that I would change.

I don't think it actually impacted on my private life, at least I don't think so.

Isabel: I was a little bit disappointed in myself that I wasn't able to somehow establish a more effective communication channel. It was an extremely uncomfortable situation, which I would have rather not been in. It hasn't changed my nursing practice at all because I still believe that I acted in the correct and necessary way for that patient. Perhaps it has taught me a little bit more patience and different ways of communicating. Perhaps I have learnt the art of keeping cool under situations like this and not letting her see that she was starting to annoy me. . . . I have learnt that, or maybe not learnt, I still have got faith in myself and the way I have handled the whole case. It is important also to have a good back up support for yourself, in the way of colleagues mainly. . . . I've learnt a lot out of this experience. One conclusion I came to was that nurses have not got any rights at all. Nurses are expected to stand there and act as the punch bag, verbally and maybe physically as well. No one seems to respect the nurses' rights in objecting to being spoken to in an abusive manner. Nurses need a Code of Rights as well so something needs to be done about that to empower nurses. We can't change situations that happen but we can actually empower nurses to actually think and say: "Look my professional organisation says I do not have to put up with this." . . . We all realised that it had been a valuable team learning experience and I think some of us saw colleagues in lights that we hadn't seen them before from a supportive point of view.

I did take it home the first couple of days and I thought about it a lot.

Jane: Conclusions? Well there are two levels of conclusions really, there's the professional one and there is the personal one. In retrospect we couldn't have saved him, I mean there was no cardiac muscle to work with so we were pushing it up hill anyway but I feel that I need to know more, you know, I need to have more information, I need to have more knowledge. I should have trusted my instincts and stayed

with the client. I don't want to learn by mistakes, not at that level, you can't afford to make mistakes at that level of seniority of nursing. This is a person's life, you don't play around with that. . . . Conclusions? I gave up my position. That was one of the reasons, I came to the conclusion that I didn't want to be in that situation again unless I had some more answers. I mean it's not saying that I don't have background (knowledge) because I do, you know, you can't have nearly 20 years of nursing and not know what your talking about. I know what I'm talking about but I need to know more. If I'm going to say that I'm a clinical expert in nursing then I need more background. The experience took me down a peg or two. If you are going to stand up and say: "I am a good nurse", then you'd better make sure that you are.

On a personal level it just showed me the vulnerability of me as a human, you know that I don't have all the answers, I may never have all the answers. The other thing that really shook me personally was that you couldn't rely on help, on people, whether it's their level of experience, their skills, or just their personality.

The above responses clearly indicate that all participants did learn, or at least gained insight from their experience. In summary the following 'gains' were most often eluded to:

- The experience contributed to increased belief in oneself, strengthening self-confidence, and enabling participants to be more comfortable in their professional role;
- Participants reported frequently increased or renewed awareness of their existing knowledge base;
- Participants felt reinforced in their existing ideas, beliefs, and theories, as well as their roles and responsibilities;
- The experience heightened their awareness of learning as a lifelong process;
- The experience enabled participants to be better prepared 'next time'.

In regards to how the experience related to, or affected them as a person, quite a few participants reported that they took their worries and concerns home with them. While some participants noted no 'personal' affects or gains outside nursing, others maintained that you can't separate the professional from the personal and that their nursing experiences did have some sort of flow-on effect on their personhood as well:

- the experience contributed equally to personal development;
- the experience highlighted, or increased their realisation of the vulnerability of people in general and themselves in particular.

Because of the nature of reflective thinking, it was first of all assumed that some participants might not have completely finished 'mulling over' certain aspects of their experience at the time of interview one. Indeed, some participants mentioned that they were still in the process of finding things out during the first interview. Secondly, it was assumed that, as a result of discussing their situation/experience, further reflection could take place culminating in new insights and knowledge. Therefore, during the second interview, all participants were asked what they had gained or learnt from the situation/event since the previous meeting:

Ann: I don't think about it as often, like I feel from the last interview I've resolved that whole situation.

Betty: Since the last time I spoke about this we have had a ward meeting. We discussed this whole issue because it did create some feeling in the ward that might lead to some problems later. I still don't think that after that meeting everybody agreed but I feel that I would make exactly the same decision again. I think the situation was clouded a bit because of the cultural safety issue. People felt that they were being forced into making decisions, and that if they didn't make certain decisions they would not be seen as being culturally safe. I still think rules are there for a purpose but you have to bend them at times. You're never ever going to have a clear consensus, your colleagues are never always going to agree with you because they have different past experiences, different personalities. I haven't learnt anything new, you still have to take into account other people's opinion. I think this is how it is in our profession, it's not autocratic.

Clare: I have learnt that I've got quite a strong personality and I should use it a bit more if need be. Not to be afraid of other people, so stick up for yourself. I've learnt to be an advocate for my patient.

Diana: I think as far as being placed in another ward I think I have changed my attitude. I am more positive about it.

Ellen: I haven't thought about it at all since our last interview.

Fred: I feel that the situation that we've discussed hasn't resolved and these things will continue to happen. They will happen for a number

of reasons such as resource management, personnel planning, all that kind of stuff which results in staff being put into clinical areas for which they are not particularly trained. I feel that the overall outcome of this situation will never be resolved when people don't accept constructive criticism.

Gwenda: I've learnt to go with my gut feeling again. Know that, if I feel something is important, I should do it. I've learnt that I'm quite capable of picking up something that's wrong, know what to do about it.

Helen: No, I haven't given it much thought, and given a similar situation, I would probably deal with it in a similar way. I am still very unclear on how the criteria (for sectioning under the Mental Health Act) are determined. How can you walk into a room and take it on face value when someone says: "No, I'm not going to commit suicide, I'm going to be fine."

Isabel: No I don't think that I have learnt additional things concerning this case since our last interview.

Jane: I guess I've looked at it and thought that I'd had really high expectations of myself and maybe that's not such a good thing. I think we all have sort of human frailties and I don't see, like I said before, that I could know all the answers. I don't want to be a super nurse. I just want to know that I can do a good job, that I can do the best for my patients and that I can be a good teacher.

The responses in the second interview clearly indicated that some participants felt that they had sufficiently worked through the experience. These participants did, or didn't gain any more insights but expressed no further questions, uncertainties or 'worries', and for them the particular experience had become 'a thing of the past'. Yet, for others like Fred, Helen, and Jane, certain aspects of their experience remained unresolved and still required further reflective thinking.

In regards to the interviews, the study found that participants experienced more difficulties in recalling newly developed insights and skills than recalling the event and the associated meaning making. Reasons as to why this might be so, will be discussed in the next and final chapter.

INTERVIEW FEEDBACK

Asking participants to recall unusual non-routine experiences carries the inherent risk of reproducing the stresses and strains that marked or were part of the original event. To provide the researcher with feedback in regards to participants' perceptions of the experience of being interviewed, respondents were asked whether, and in how far, the interview had helped them to make better sense of the experience:

Ann: I think it went really well, in myself I feel lots better now. I probably put away those questions and not asked myself those questions or had them in the back of my mind but not actually waited for answers or anything like that, so I feel as if I've resolved that whole nursing experience.

Betty: I think this interview helped quite a lot. I was just thinking that I have to put into words coherently, not just in my head, because someone's listening to it. I think that's why, when you can sit down and talk about something reflectively, it has such value. You're having to not just 'tell' yourself and understand all your own feelings, but you have to explain it to someone else, knowing that they don't think necessarily like you do, or that they weren't there or whatever, and I think that clarifies matters. In fact I feel quite, I feel a lot easier about the whole deal. I suppose it just has made me think again, clarified to me why I made the decisions I made, and said the things I said. I don't necessarily think I was particularly right, but it was right for me at that particular moment because I knew why I was making those decisions. I knew how I could work around those decisions and still provide as best care. So yeah, it was good to talk about things, and good to try and put it chronologically and then reflect on why you said and thought, why you did certain things or said certain things, it clarifies a lot.

Clare: Probably because I've thought about this case so much at the time, and I was really frustrated with it, I spoke about it with my colleagues quite a bit. You know, I mean I really did go over and over it in my mind. I felt a lot better about it at the time but it certainly made me think about the way I think. The thought processes that you go through and why you think things, you know, I mean why do you think, why should I be doing this or that or, yeah, this interview made me think about my actions.

Diana: I guess I never really thought about that. I knew that I asked myself a lot of questions about the patients' side of things. I know I always will run through a lot of different things from my experience. I think it does help to know that you actually rationalise things more

than just go with feelings. You do actually run through all these things in your mind that, even though you might not list them down, you're thinking about all sorts of different things at the time. It just helps to clarify that you're on the right track and it helps to know that you're doing the right thing. You are actually really thinking about things not just feelings and intuition, you're rationally thinking about everything.

Ellen: Just talking about it makes me realise how, I shouldn't say how special, but how complicated nursing is, and how different people will challenge you in different ways. It's not necessarily the clinical that gets you, it's the personality of different people and different patients. Maybe with the years of experience I have in my area, I'm clinically okay, but it's the different aspects that come in that change it. Talking with you allowed me to revisit things, go over it again. I don't do that usually, I just get on with it.

Fred: It has helped me a great deal because what you've done is you've broken it down. Like when I walked in here I was treating it as one incident where in actual fact it's ten, fifteen maybe a hundred different incidents within the same situation. It has helped me a lot to think about it because I'm the kind of person that does think a lot about things, maybe too deeply sometimes. I think it certainly depends on the kind of personality you have and when you're talking about nursing as well you have to take into account those nurses who couldn't give two tosses about their job. They come for 8 hours a day, go home, and don't think about it until they have to go back to work the next day.

Gwenda: Yeah, it has made me think. I mean it's a job you do day in, day out and you tackle a range of problems but you don't sort of stop and think about why or what answers you've got or what you didn't get. I mean you do it and if you get an answer you're lucky, if you don't get an answer, well, maybe next time sort of thing. It's a job that comes naturally when you've been nursing for a long time. I never stop and think about why I do things or why I don't do things, it's something that's got to be done so you do it so I never stop and analyse it.

Helen: It has actually been really interesting going back over it all, taking that step back and looking at what happened, what you did and why, and how did you come to this decision. When you're dealing with that sort of a situation you don't consciously think it through, it just seems to flow on. So to actually have to sit there, slow down, recount the thing in some sort of logical order, then go back through it, and look at the different steps has been very interesting. Why did I think that, what alerted me to it. Even when you sit there and you encourage me to do it, I've actually found it really quite hard work because when I do look at my practise and think about what I'm doing, I don't do it in that sort of a depth. Not consciously so yeah, it's been quite good.

Isabel: Perhaps it's made me sit down and in verbalising what happened I perhaps reinforced certain coping strategies for myself. Its not something you usually do you know, to sit down and analyse why you felt this way or that way, and what you were in fact thinking.

Jane: I felt pretty comfortable, I mean talking through situations like these and having questions asked about what you were feeling or thinking, or what you were experiencing was really good. I mean I would not have gone into it in such depth, unless I'd gone through a process like this and that's why, really, I responded to your request for participants because I thought to actually explore this whole situation would probably be quite valuable.

Overall participants felt that the interviews were helpful in terms of increased awareness, increased understanding, of the nursing context. Participants commented specifically on how the interview made them think more consciously about the event and their perceptions in regards to the whole experience. This is an interesting notion as it confirms Sense-Making's assumption that: "... any individual who is listened to on her own terms emerges from the interaction more conscious of her world and, thus, better able to act upon it" (Rutledge Shields & Dervin, 1993, p. 76). Nowhere did this finding come out more clearly than in the narrative provided by Helen:

It just makes you very much more aware of the issues governing your practise like, the ethical codes that you work under, the statutes that cover your practise. Well this is for me anyway. It is all the legal-ethical issues surrounding your practise that, surprisingly enough, I hadn't really thought about it until tonight (the interview).

SUMMARY

The importance of language in order to think was emphasised by Dewey (1933) and Mandler (1984). The ability and usefulness to engage in self-questioning in times of doubt and perplexity was reiterated throughout this chapter. It was argued that self-questioning like comparing and contrasting situations is an important component of reflective thinking. The nature of the questions generated in the course of self-questioning is indicative of the 'reality' as perceived by the participants, and the exploration of self-questioning resulting from specific micro-moments would reveal the focus of reflective thinking.

The study clearly demonstrated that self-questioning enabled participants to mull over uncertain, unique, and/or conflicting situations in an attempt to create meaning in order to select and prepare for appropriate nursing interventions, or to evaluate the correctness of one's actions. Participants were quite clear about the benefits of self-questioning which ranged from structuring their thought processes to think ahead and redress potential problems, to being able to guide their nursing actions. It is interesting to note that participants mentioned that reflective thinking increased or renewed awareness of own knowledge base and furthermore that it reinforced existing ideas, beliefs, and theories.

In chapter 7 the findings of this study are discussed and a model of the reflective thinking process is developed.

CHAPTER SEVEN

REFLECTIVE THINKING: MAKING SENSE OF IT ALL

INTRODUCTION

As discussed in chapter 1, the concept of reflective thinking is firmly established and widely promoted within professional nursing as the method par excellence to learn from clinical experiences and advance professional nursing practice. However, anecdotal evidence, and a review of the nursing literature, revealed that the lack of definition and the use of multiple terminology have added to the general confusion as to what is reflective thinking, and the ways in which it can contribute to nursing. The lack of actual research concerning reflective thinking in nursing practice was noted. These findings should be of concern to all nurses and nurse-educators who advocated reflective thinking and relied on it as a way to learn from, and improve nursing practice.

This final chapter commences with a discussion on the research approach. Attention is paid to the literature, especially as it relates to the use of the concept of 'critical' in regards to reflective thinking. The research findings are discussed in regards to the contextual factors that determine/influence personal perceptions, as well as the cognitive strategies employed by the participants in order to develop an understanding of the situation. Furthermore, the focus of reflective thinking is examined, culminating in the development of a Model of Reflective Thinking. The implications of the current research findings are discussed, especially as they relate to nursing practice and nursing education. Suggestions for further research are made. Finally, the research method used in this study is evaluated.

RESEARCH APPROACH

To ensure a firm platform on which to conduct research, the researcher formulated an operational definition of reflective thinking based on the literature review and the underlying writings of Dewey and Schön that have been most influential in the area of reflective thinking:

Reflective thinking is a highly adaptive and individualised cognitive activity in which the individual deliberately and purposely engages in discourse with self in an attempt to critically, yet creatively analyse, and make sense of past and current experiences or phenomena leading to a changed, or new, perspective which influences future behaviour.

This definition acknowledges and takes into account the many contemporary authors who have discussed reflective thinking as a *process*, and related its *outcome* to learning in the practice setting. To ensure that the participants were not influenced neither this definition of reflective thinking nor any other was shared or discussed with them.

There appears to be agreement in the literature that unusual or non-routine situations give rise to feelings of uncertainty, doubt, and unease, which set in motion a cognitive activity known as 'reflective thinking'. This study proposed that exploring unusual events in a step by step approach would provide maximum opportunity to expose not only instances of, but also trends in, reflective thought and related processes. Participants were therefore asked to share an event or experience that fell outside the usual range of experiences.

The Interviews

Ten participants shared each one clinical event. From this a total of 59 micro-moments were mutually identified and examined in terms of:

- how the participants perceived their particular situation;
- the participant's emotions and feelings;
- the impact of the event and how it related to previous experiences;
- the questions and confusions the participants identified;
- the importance of those questions and how these questions helped;
- those aspects within the situation that helped or hindered to find answers/reduce confusion experienced;
- what would have helped to clarify the situation and how/in what way;
- what participants had learnt as a result of the experience;

Although Schön classified reflective thinking in terms of whether it occurred 'in' and/or 'on' action, the questions that guided this research did not attempt to make any such discrimination. The focus of this study was on clarifying what reflective thinking is, how qualified nurses think reflectively, as well as the focus of their reflective thinking in clinical practice. Although the interviews took place after the event it is argued here that the information asked for covered reflective thinking during, as well as after the event. The issue of whether these reflective thinking processes can be labelled 'in-action' or 'on-action' was not considered to be important in this study.

Participants' Use of Journals

It was suggested to participants that they might want to 'journal' certain aspects of the event to preserve their thoughts in regards to the event. In spite of the fact that journals are often mentioned as an 'ideal' means to encourage reflection, the researcher did not make it a 'conditional' component of this study, as there is anecdotal evidence that suggests that journaling is rarely undertaken by practitioners as a matter of routine. Furthermore, Bellman (1996) found that, in spite of there being an agreement to maintain a reflective journal for her study concerning reflective nursing practice, very few nurses actually did. The researcher believed that 'insisting' on journaling would have introduced a degree of 'artificialness'. Firstly, the act of journaling could result in a shift of focus from reflective thinking *in practice*, to how to *write a proper reflective journal*. Secondly, Cameron and Mitchell (1993), and Wellard and Bethune (1996) identified situations where students of nursing seemed to be compelled to write what their teachers 'wanted'. Equally, the researcher did not want to be in a position where participants would write 'artificial' reflections to 'fit' the research. Lastly, the researcher needed to remain true to the Sense-Making method that would reject any situation resulting in participants feeling disempowered because they were not given options regarding journaling. Only one respondent did make some 'notes' to log the order of events as they occurred within the experience.

Bias and Hindsight

No attempt was made to eliminate 'bias' assuming that such might be possible. Kemmis (1985) asserted that reflection is never value-free, and that it must necessarily reflect social, cultural and political interests. In fact, as stated in chapter 3, the prime focus of this study was concerned with the process of reflective thinking,

rather than the accuracy (related to content) of reflective thought. Furthermore, this study did not attempt to avoid the so-called 'hindsight' bias that, according to Jones (1995), influences peoples' recollection of events because of their knowledge of the final outcome of the event. In this study it is argued that:

- Unless one would do the interview while the event is in progress, (if it were at all possible) any information given after the event is at all times mixed with the knowledge of hindsight.
- Hindsight bias is not necessarily a negative phenomenon and may prove to be a fundamental component of reflective thinking. It could be argued that using the wisdom of hindsight influences the recollection of events by enriching it with additional and highly valid contextual information.
- Reflective thinking is always contextual and fully dependent on the reflector's perception of the situation. If hindsight bias is a 'naturally' occurring human phenomenon, then it should not be isolated from a study that is concerned with human sense making and reflective thinking.
- Reflective thinking can not be studied by observation only, as observations only reveal aspects of the person's behaviour, but never the perceptions, motivations, 'reasonings', or knowledge underlying the behaviour. Observing participants during clinical interactions, does not resolve the problem of hindsight bias rather, the phenomenon is magnified by extending it from the actor to the observer.

REFLECTIVE LEARNING VERSUS CRITICAL INQUIRY

The literature review (see chapter 2) revealed that, in spite of the existence of multiple definitions and terms for 'reflective thinking', there appeared to be an agreement that the concept of reflective thinking is first and foremost a process and that it has an outcome. A variety of writings was discussed, most notably those of Dewey (1933) and Schön (1983, 1987). Dewey deliberated on the concept of reflective thinking at length and in great depth. He provided a definition of reflective thinking and maintained that the concept of 'critical' was a vital ingredient for this type of thinking as it contributed to thoughtfulness, to logical and rational thinking in the pursuit of finding answers and solutions.

Reflective thinking gained renewed prominence with the publications of Schön's work in the 1980s. Schön discussed reflective thinking extensively in regards to professional practice, and he argued its importance for making sense and learning in the context of the 'actual' practice situation. Schön founded his theories on Dewey's work, but introduced a range of new terminology. He labelled Dewey's situations of 'doubt and perplexity' the 'fuzzy zones' of professional practice, and he described the concept of reflection as the method par excellence for professionals to learn from practical situations, hence the term 'reflective practice'. By claiming reflective thinking and granting it 'professional' status, reflective thinking became removed from Dewey's 'everyday' life. Schön did not mention the concept of 'critical', which is somewhat surprising, as this concept had gained in prominence and importance in the 1970s with the rise of the 'Frankfurt School' and Critical Social Theory.

Within the nursing literature, Schön has become one of the most frequently quoted authors on the topic of reflective thinking, be it that it is most times labelled as 'critical reflection' or 'reflective practice'. Schön is often mentioned in 'one breath' with authors sympathetic to Critical Social Theory like Freire (1970), Habermas (1974), Kemmis (1985), and Van Manen (1977), thus creating the impression that Schön is like-minded. This however is incorrect and has contributed to serious misconceptions in the nursing literature in regards to the concept of reflective thinking.

In his discussions on how to educate the reflective practitioner Schön introduced a *model of coaching* which emphasised the role of the expert practitioner as 'model' and preceptor for the student or less experienced practitioner. Because of this approach Schön should be placed into the category of authors who view reflective thinking as a strategy for *learning*. Schön emphasised efficient application of professional knowledge to given ends, on doing the job properly and effectively. Applied to the nursing scene, the higher goals and objectives of nursing and caring are not the subject of scrutiny, nor are the institutional, social, and/or historical constraints. Thus, Schön's coaching model, while androgogical in its approach, is task-focused, and constitutes a continuation of past practices. As such, Schön's coaching model is likely to produce nurses who conform and who are, to speak in Freire's terms, 'domesticated'.

This study found a substantial philosophical shift in the usage of the term *critical* that accompanied the concept of reflective thinking since the early days of Dewey and the contemporary *critical* ‘reflectionists’. For the truly *critical* reflective thinker, Schön's approach is per definition not far reaching enough and therefore unacceptable. However, the concept of critical is by no means clear and there is no consensus as to what it is (see chapter 1 and 2). For example Smyth (1989a, 1989b) maintained that critical reflection focused at a personal level on such processes as describing, informing, confronting, and reconstructing situations. Other authors argued that *critical* reflective thinking advocates for an end to the status quo by challenging entrenched positions and inequalities, by emphasising the consequences of actions, and arguing the need for emancipatory actions leading to social reconstruction. Thus, Cox, Hickson, and Taylor (1991, p. 384) maintained that critical reflection provides a way to: “. . . examine our practice world in order to locate within it hidden elements of power and domination that we have not recognized or not challenged, and that failed to serve the interests that we would wish to acknowledge as legitimate.” Interpreted in this way, *critical* reflection goes beyond questions of learning and proficiency towards a thoughtful examination of how contexts determine health and influence the allocation of nursing resources. As illustrated in Table 7.1 the nursing literature described reflective thinking either in terms of reflective thinking for learning, reflective thinking as critical inquiry, or a mixture of both.

<i>Reflective Thinking for Learning;</i>	<i>Reflective Thinking as Critical Inquiry;</i>
An effective strategy to make sense of, and learn from, specific situations in practice. The emphasis here is firstly on making sense of the immediate here and now situation, and secondly on learning, on the development of practical knowing/knowledge that assists efficient application of professional nursing interventions and skills to achieve given ends.	Goes beyond questions of technical proficiency to thoughtful reflection as to how contexts influence health and nursing. Critical inquiry is concerned with examining why certain choices of practice are made, the influence of hegemonic conditions within the health delivery system as well as concerns for ethical and moral issues related to justice and equity.

Table 7.1. Comparison between Reflective Thinking for Learning and Reflective Thinking as Critical Inquiry.

While both approaches to reflective thinking are not necessarily incompatible both have a different focus and function. Reflective thinking, as conceptualised by Dewey and Schön, serves as a tool for learning, and as such it can be classified under general learning theories, while reflective thinking as critical inquiry falls within the Critical Theory paradigm. Besides a general lack of definitions of the concepts involved, this study found widespread confusions, unsubstantiated beneficial claims, as well as a lack of clear differentiation between the two approaches. These findings question the decision of those nursing bodies that advocate or insist on the concept of critical reflective thinking being a fundamental component of professional practice. Furthermore, the wisdom of the uncritical application of reflective thinking as a tool for learning in nursing education in the midst of all this confusion should at least seriously be questioned.

CONTEXT

Context can be defined as the conditions and circumstances that are relevant to an event/experience. According to Dervin (1996), context is the carrier of meaning and a label for a site of struggle to reach for a new kind of understanding.

In any study that explores reflective thinking in the clinical setting the phenomenon of context needs to be included and preserved. Without the inclusion of context, human meaning making and behaviour can not be understood (Stevens, 1989). In chapter 3 it was noted that this study applied a qualitative research method called Sense-Making. Furthermore, it was emphasised that the use of Micro-Moment Time-Line interviews, which is unique to the Sense-Making method, ensured that each event remained firmly anchored within the context that gave rise to the situation.

A whole range of contextual factors related to the client, the nurse, and the social-physical-political 'environment' determined in the final analysis how a given situation was perceived. The following contextual factors were most often identified:

- Client related factors included; physical and mental condition at the time, psychological make-up or personality, family, social, economic and cultural background, gender, age, and history of client, perception of own situation and meanings attached to same, expectations and outlook on near and far future.

- Nurse related factors embraced personal and professional aspects. Personal aspects included past personal experiences, psychological make-up, social, economic, and cultural background, gender, age, expectations and outlook on life. Professional aspects included the nurse's philosophy of nursing, ability to relate to the client, assessment skills, motivation and attitude at the time of encounter, perception of own and client's situation, ability to utilise knowledge and past experiences while acknowledging the uniqueness of the situation.
- Environmental factors included among other things the physical environment/setting of the nursing situation, the presence/involvement of other people, resources available to assist the nurse and/or the client, the availability of time, institutional rules and regulations, as well as social/health policies and legislation.

In any clinical setting the event is the sum total of the contexts that surround the nurse and the client. *Context* is thus much more than what is visible. It includes all the 'baggage' that the person brings into a situation, along with emotions and feelings (see chapter 4). The point of convergence, the encounter between two or more people, creates a new context called the *event* or *experience* which, nevertheless, can only ever be appreciated from one's own context. Thus, the client's perception of a particular event might be similar, but is never identical to that of the nurse. (This study examined context only from the nurses' point of view and not the clients'.)

The present study confirmed that participants did not come 'empty handed' to a new situation. The perceptions of the events described were influenced by the participants' own 'reservoir', their cognitions, assumptions, abilities, feelings/emotions and past experiences/information. Most narratives demonstrated that perceptions were 'pre-shaped' prior to the actual experience. For example, Diana and Ellen both 'knew' what it meant to be sent away to another ward to help out and both would have declined to go, if the opportunity had been there. Similarly, Isabel volunteered to care for Karen and Jimmy because her colleagues opted out on receiving the report from the night staff. Within this study these perceptions are labelled *pre-perception*. Pre-perceptions enable the person to 'generalise' about situations, to create some sort of mental 'picture'. Helen provided a clear example of such a pre-perception in action and her

narrative was used for illustrative purposes. Needless to say, Helen was required to adjust her pre-perception on the spot. Helen:

He just rang his bell. I went to answer it, thinking: "Oh, I wonder what he needs, perhaps the anti-emetics hadn't been working properly." I went in with these preconceived ideas about what I was going to be doing, assuming that he was going to need a hand, or ask for something. So I walked in with my mind set . . . He just sat there on the edge of the bed as calm as you like, saying: "I want to go!" You go along in all aspects of your life making assumptions . . .

Pre-perceptions are 'interim' perceptions that are open to questioning and adjustable/changeable by the individual on an ongoing basis as and when required. In a sense, the adjustments to one's pre-perceptions might be compared with driving a car through traffic; the driver is required to constantly adjust the speed and the position of the car depending on the road conditions. When pre-perceptions are no longer open to personal questioning or scrutiny, but are accepted as facts, these pre-perceptions become 'the taken for granted' view. When situations in nursing are taken for granted by the individual, subtle changes within the dynamics of the situation are missed and *similar* situations become labelled as *same* situations, resulting in nursing interventions becoming routinised and habitualised.

The relationship between pre-perception and context is depicted below (see Figure 7.1). People do not enter a situation with a 'tabula rasa' mind, as is indicated in the box on the left. The broken lines represent not only the interconnectedness, but also the interdependency that exists between any particular context and the wider context in which the event took place.

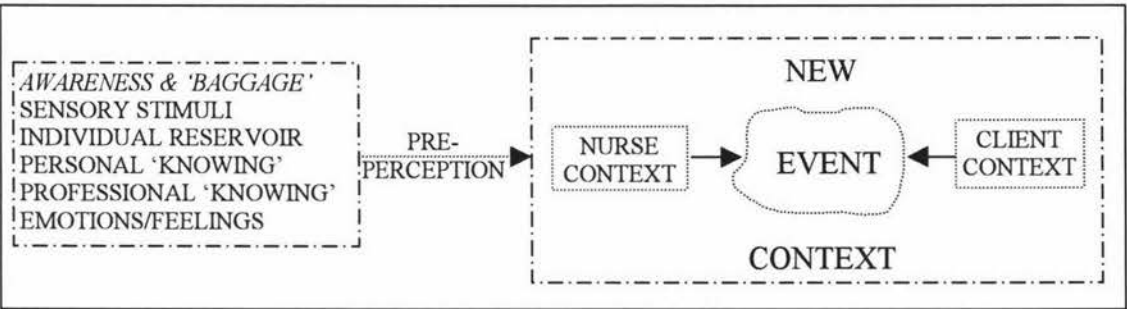


Figure 7.1. The relationship between pre-perception and context.

TRIGGERING REFLECTIVE THINKING

Reflective thinking arises out of situations of doubt, hesitation, and perplexity, and prompts the individual to search for a solution of the situation (Dewey, 1933). These situational discontinuities, or gaps, are typically experienced when the individual is confronted with an unusual or non-routine event. In order to make sense of such situations the person needs to bridge the gap between what is perceived through sensory receptors and how it can be mentally explained. As noted in chapter 5, this study found three main factors that contributed to the formation of situational gaps:

- lack of situational information;
- overload of situational information;
- lack of appropriate propositional knowledge to process situational information.

The following section focuses on, and discusses, the research findings in order to develop an understanding of how participants used reflective thinking to deal with discontinuities, the mental processes involved, and the strategies employed to make sense of experiences/situations.

Collegial Support

Support from colleagues was a major factor that assisted participants, especially on those occasions, when participants couldn't make sense of the situation. Ann, Fred, Isabel, Diana and Ellen all mentioned the need for support and approval from those staff that they perceived as more senior than themselves. Even senior nurses such as Helen and Jane appreciated peer support. Helen referred to this when she talked about her need to 'bounce off' some ideas, while Jane talked about her sense of 'aloneness' in making decisions, and her need for reassurance from senior nursing colleagues. Having a colleague at hand might unwittingly contribute to the three attitudes that Dewey (1933) identified as prerequisites in order for reflection to take place. It is suggested here that having a colleague who is willing to 'think along' with you, (but not necessarily agree with you) increases the *open-mindedness*, as two minds can explore more possibilities. Similarly, it contributes to *wholeheartedness*, as the opportunity to talk to someone about the situation gives an upward impetus to thinking. Furthermore, discussing complex issues with a colleague is a *responsible*

attitude as it enables the person to separate sense from nonsense, to synthesise ideas more clearly. The fact that collegial support was rated so highly among the participants demonstrates not only the need for cognitive dialogue in uncertain situations, but also emphasises the highly individualised nature of reflective thinking and the 'loneliness' that might be experienced by those engaged in it. Being able to 'reflect aloud', to at least share one's thinking with a colleague certainly helps to clarify the issues at hand.

Previous Experiences

This study left no doubt; previous experiences were identified as the most important factor that helped participants to make sense of the situation. No matter how novel the situation was, the more experienced participants were more able to identify and isolate aspects that they could mentally process and manipulate in the pursuit of making sense. Previous experiences enabled participants to have certain 'expectations', even in rather unique situations. Experience provided a sense of 'familiarity' in terms of what to expect, what was likely to happen or what nursing interventions were required. Furthermore, it contributed to participants feeling more confident about self. Individuals who feel confident about self are more likely and willing to try out novel interventions in an attempt to respond to a challenging situation.

Past experience provided participants with a stock of practical knowing, a storeroom full of memorised situations, which could be accessed to evaluate the current situation, and mobilised to produce ideas and new understandings. These findings confirmed the research results from Pardue (1987), that claimed that experience rather than knowledge was the most important factor in clinical decision making. Indeed, the narratives in this study overwhelmingly demonstrated that the inherent wisdom of past experiences are actively used for the here and now. All participants indicated on numerous occasions that they deliberately and actively compared and contrasted current situations with past events while looking for signs of:

- Similarities: Fred: "I knew that I'd been in this situation before. I had seen lots of patients like John. I'd *seen it all before*. . . I've been with other colleagues in similar situations . . .";

Or,

- Discrepancies: Helen: "It is *not common* to see a client with long standing diabetes that is that thin and that unwell, unless there is something else paralleling it."

This process is what Bruner (1974) labelled *perceptual categorisation*, which assists the recognition of similar situations in the future, by establishing 'feature' lists or schemata. Perceptual categories and pattern recognition are two complementary functions required for human sense making. The former is the hierarchical organisation of representations for easy access (features only), while the latter is concerned with the scanning of these features into patterns in order to make faster sense of sensory perceptions, thus allowing human beings to respond rapidly to their ever changing day to day world.

Another important concept is that of *framing*. Schön (1983) did not provide a definition of framing, but he did talk about 'constructing a mini-paradigm', a notion that is close to identical to Bruner's (1990), who maintained that framing is a means to construct an 'ordered' world.

The responses obtained from participants in this study, combined with the writings from Schön, Bruner, and Knowles (1980), resulted in the development of the following definition for framing:

Framing is a cognitive activity of building a mental constructing⁴, or 'frame', that enables the person to further analyse a particular situation for increased understanding. A 'frame' is the outcome of the exploration and manipulation of perceptual categories, and the search for recognisable patterns or features.

Framing is per definition always contextual and it is therefore no surprise to find that the more experienced participants were not only more able to frame a situation, but they also demonstrated more readily their awareness of all the 'grey areas' that are typical of contextual situations. Nowhere was this more apparent than in the narratives related to Betty's experience. It is obvious from Betty's description that the junior

⁴ The above definition uses the concept of constructing (a verb) rather than construction (a noun) to emphasise the ongoing nature of framing. The word 'frame' between inverted commas was used to reduce confusion for the reader although the term 'framing' would be more consistent with the Sense-Making philosophy.

nurse, who asked on behalf of the family for tea-making facilities, only 'framed' the needs of the family. She did not consider the consequences of breaking the ward 'rules' other than that she would just write it in the client notes. Betty however framed the wider context. Her 'picture' included the wider implications of breaking a 'rule' that had a very obvious function namely, the potential harm that could be caused if things went wrong, the legal implications of an accident, and the responses from other families. Betty was also concerned about the potential fall-out from her colleagues, and the long-term consequences of her decision. Using a wider frame is more likely to result in an ill-structured problem. King and Kitchener (1994) maintained that ill-structured problems can't be described with a high degree of completeness, nor resolved with a high degree of certainty. King and Kitchener found that even when such a problem was considered resolved, experts often disagreed about 'the best' solution. Indeed, Betty fully realised that she was confronted with an ill-structured problem as she stated:

Every decision you make has to be taken in the context in which it occurs, the family involvement, the illness of the child, and the child's developmental level. There is no right answer and you are never going to please everybody... People have got different levels of experience and different interpretations of how they want to give care. We all give care in different ways and we have to be open-minded and mature enough to accept other peoples' decisions and work with them.

Betty's narrative shows that having more experience does not necessarily translate in being able to make decisions more easily, but merely that the person becomes acutely aware of the many variations, the many approaches, that can be taken to resolve the issue at hand. As Betty so aptly stated: "There is no right answer . . . There are many ways in which you can deal with it, and the way you do it isn't necessarily better than somebody else's." Betty's comments demonstrate that the 'frame' produced by experienced practitioners is not necessarily 'clearer' but most definitely more ill-structured and complicated due to the inclusion of so many possibilities.

Experience and Knowing

The importance of, and the links between, experiences and the development of knowledge have been emphasised by many authors as noted in chapters 1 and 2. However, experience itself merely provides learning opportunities. What the

individual learns from the experience depends on how he/she internalises and builds on the opportunities present. Knowing, be it personal or professional, is a continuous process that is the result of the individual's interactions with the environment through internalising observations, perceptions and experiences-in-the-world (see Fig. 7.1). The value of knowing is found in its practical implications and in its usefulness for solving problems encountered during experiences. While theoretical knowledge is important for any professional discipline, Carper (1978) pointed out that this might not always be sufficient in regards to human behaviours and experiences such as encountered in nursing. Carper (1978) identified four fundamental patterns of professional knowing in nursing:

1. Empirics: the science of nursing; knowledge that is systematically organised into general laws and theories for the purpose of describing, explaining and predicting phenomena;
2. Esthetics: the art of nursing; knowledge that is the result of accumulation of unrationalised experiences and includes discovery learning;
3. Personal knowledge; is the knowledge concerned with the knowing, encountering and actualising individual self;
4. Ethics: the moral component; knowledge required to understand different philosophical positions and frameworks devised for dealing with complex moral judgements and obligations regarding what is 'good' or 'right', or what ought to be desired.

Fundamental patterns of knowing are influenced by a whole range of unique contextual factors and can only develop as a result of 'real world' experiences.

Self-Questioning

Internal discourse and self-questioning played an important role in reflective thinking. Participants clearly demonstrated that *nursing is thinking followed by doing*. When confronted with challenging situations, all participants assessed the situation, engaged in problem posing, explored options and opportunities, and assessed risks and consequences in varying degrees of success. Asking what went on in the participants' head at the time of the experience and what they were thinking of, required them to go 'back in time', triggering off a variety of memories and feelings, some pleasant but

others painful. Participants recalled achievements, 'spot on' decisions, but also confusions, things that seemed strange or couldn't be explained. These were the moments when 'self challenged self' by means of engaging in self-questioning, by holding an internal dialogue, or discourse-with-self. The finding that two participants were initially not aware of this internal process is not out of the ordinary. Boyd and Fales (1983) found in their research that participants were not aware that they were engaged in reflective thinking. One possible explanation might be that people usually do not think about their thinking. In other words, it is a lot more likely that an individual is able to recall *what* he/she was thinking about, than to recall *how* he/she was thinking about it.

The findings of this study suggest that self-questioning is an integral part of discourse-with-self, and an important component of reflective thinking. As discussed in chapter 6, participants believed that self-questioning assisted the structuring of their thought processes, enabling them to think ahead, to clarify issues, to better understand and make meaning. The reason as to why self-questioning is helpful is difficult to answer but a number of suggestions are made here as to why this might be so. Self-questioning:

- 'opens the mind' which encourages creative and divergent thinking;
- challenges the person to 'go the extra distance';
- keeps the mind focussed on the issues and the situation at hand;
- can be affirmative, thus strengthening the person's self esteem and confidence;
- assists better framing of the situation, taking account of the less obvious.

However, a word of warning is justified here. Although self-questioning appears to be an effective strategy for reflective thinking, this study does not claim that discourse-with-self and asking self questions is sufficient to make sense of a situation because clearly this is not so. Self-questioning can not compensate, or replace dialogue with colleagues, the value of which was discussed earlier. Neither can self-questioning compensate, or eliminate gaps that are essentially the result of lack of information, or where the person suffers from information overload. Last but not least, self-questioning is unable to contribute significantly to increased understanding of the

event in those situations where the person is unable to recognise patterns or categorise perceptions due to lack of experience or a lack of propositional knowledge.

The relationship between the 'event out there' and how the individual is going to deal with it in order to make sense of the event is depicted below (see Figure 7.2). Especially in non-routine situations the individual might become aware of aspects of the event that are not be understood, resulting in a disjunction or gap. The double pointed arrow indicates the constant forward and backward flow of information, via the sensory receptors, to the brain. Sight, hearing, smell, touch, and taste are the sensory receptors that connect the individual with the 'world'. Information received from these receptors undergoes changes as certain information is manipulated, adjusted, magnified and/or ignored. The outcome of this dynamic process is continuously compared and contrasted with previous understandings and experiences and the same process repeats itself, enabling the individual to increasingly 'fine tune' his/her perception of the event in an attempt to eliminate the gap.

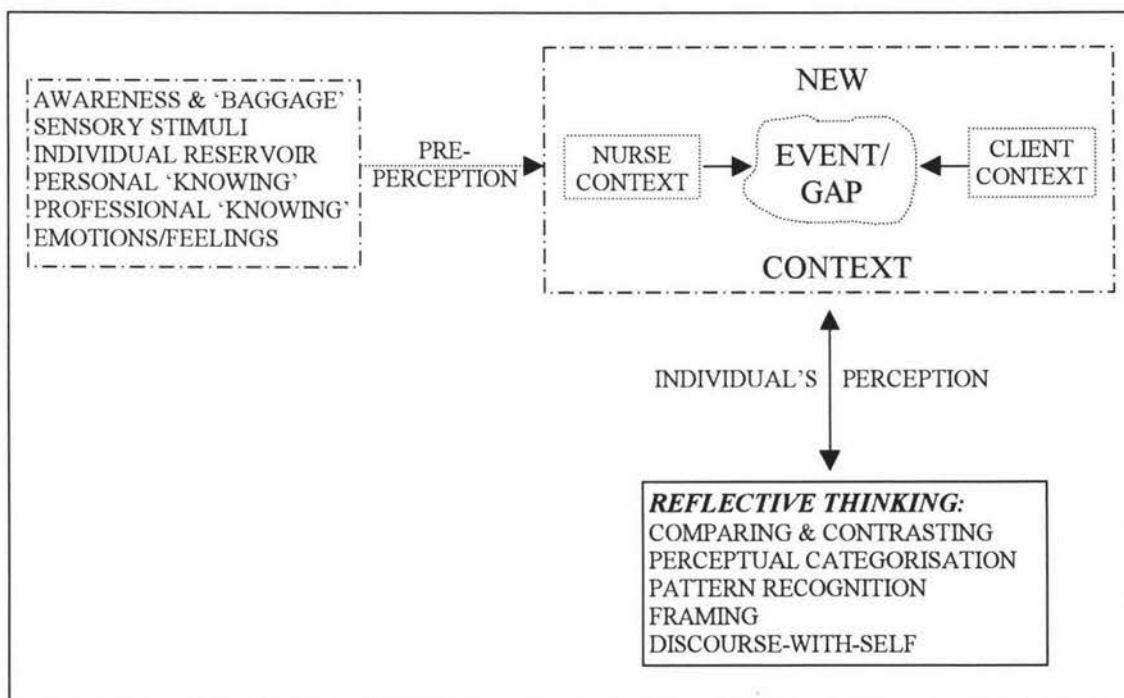


Figure 7.2. The mental activities involved in making sense of an event.

All participants without exception used discourse-with-self as a strategy to aid their reflective thinking. This study argued that examining the type of questions practitioners asked themselves during this discourse-with-self would provide

information as to the nature and focus of their reflective thinking. The following section explores the uses of reflective thinking by qualified nurses in clinical practice.

USING REFLECTIVE THINKING IN NURSING PRACTICE

The analysis of the 59 micro-moments resulted in the identification of three different foci in reflective thinking at consecutive levels. Each of these levels is extensively discussed below in terms of its use for the practitioner. Following on from this, the levels are integrated into a 'reflective thinking hierarchy'.

Reflective Thinking-For-Action

Analysing what participants were thinking of, what questions and confusion they had, and how they resolved situations of doubt and perplexity revealed that reflective thinking was used to create meaning, or make sense, of the more or less immediate situation at hand. In fact, the study data indicated very strongly that reflective thinking was first of all used FOR action, no matter whether this thinking occurred prior to, during, or after the action. This finding is not surprising if one considers that practitioners in the field are very much concerned with the 'here and now' and the 'doing' aspect of nursing.

Reflective thinking-for-action is a cognitive activity called upon in order to 'move on' and/or 'to keep going'. Participants realised that they were facing a gap, a situation of doubt or perplexity, but they also felt obliged to act, to provide care, and /or to intervene in order to change the situation. Reflective thinking-for-action required participants to focus on the nature of, and the reason for the situation, as well as on resolving the situation by selecting and choosing from a range of options what they considered to be the most appropriate intervention. It is interesting to note that the current findings are not significantly different from Argyris and Schön (1974). These authors maintained that practitioners choose and adjust their actions with due consideration for the particular situation, using theories that consist of a mixture of propositional knowledge, previous experiences and past strategies, values and beliefs.

Reflective thinking-for-action closely resembled the *technical interest*, the first of three different types of knowledge-constitutive interests as identified by Habermas

(1972). Reflective thinking associated with the technical interest aims at problem solving while taking the wider social context for granted. The emphasis of reflective thinking at this level is mainly on the technical-rational aspects of nursing care.

Reflective thinking-for-action is the first level of reflection because it is focused on creating meaning in order to *control* and *act*. As it is born out of a particular contextual situation and used for that same situation, it has been labelled 'micro level' reflection. Micro level reflective thinking is extremely important in nursing practice as the outcome of this thought process is used to guide first and foremost the practitioner's responses within that situation. Due to its nature, reflective thinking-for-action is very much an ad-hoc, informal, and ongoing process that might generate instrumental knowledge in the form of causal explanations. Applied to Carper's (1978) four fundamental 'patterns of knowing', reflective thinking-for-action contributes mainly to the empirical patterns of knowing.

Reflective Thinking-For-Evaluation

Participants used reflective thinking not only to create meaning of a situation in order to act, but also to evaluate the situation, and in particular their own role and performance within the event. This second level reflective thinking-for-evaluation is different from reflective thinking-for-action, in that its main focus is on creating understanding and wholeness of the situation. Reflective thinking-for-evaluation is more comprehensive in that it focuses on self in relation to others and to nursing. It is concerned with analysing and clarifying individual experiences, meanings, and assumptions in order to evaluate both actions and beliefs. It exposes the true art of nursing by emphasising wholeness and the existence of multiple realities. Reflecting at this level contributed to what Fred called: ". . . 'knowing myself', how I respond, how I behave . . .", but it also includes what Jane referred to as: ". . . the vulnerability of me as a human, you know, that I don't have all the answers . . ."

Reflective thinking-for-evaluation is placed at the second level because it can only occur after reflection-for-action, thus after the practitioner has created meaning of the situation and has acted. Reflective thinking-for-evaluation is identical to the cognitive activity that accompanies the *practical interest* (Habermas, 1972). The practical interest endows the reflector with multi-perspective understandings and informed

actions within a coherent framework of values in a social context. The knowledge it generates contributes to, and enriches the interpretations of nursing within a wider context. This study found that reflective thinking-for-evaluation focused on two main aspects namely the '*Situation in Totality*', and '*Self*'.

Focus on the 'Situation in Totality'

In regards to the *situation*, reflective thinking allowed the practitioner to examine a range of aspects or factors that the practitioner perceived to be crucial, as well as the exploration of the connections between the different aspects, thus increasing one's understanding and appreciation of those aspects that played an important role within the situation. In terms of Carper's theory, this part of reflective thinking-for-evaluation was concerned with 'esthetic patterns of knowing'. Esthetic patterns of knowing are concerned with trying to perceive the different components of the experience, and the 'melting together' of these into a unifying whole. Reflective thinking-for-evaluation contributes to the realisation of multiple perceptions and multiple responses. It is the realisation that practical knowledge is more than propositional knowledge applied into practice, or as Carper (1978, p. 18) argued: "It is the knowing of a unique particular rather than an exemplary class." Participants who were engaged in this pattern of knowing were genuinely concerned about the client's feelings and perceptions, and demonstrated empathy towards their client.

Focus on 'Self'

In regards to '*self*', practitioners reflected on their own role and personal knowing within the event. Applying Carper's theory, this study found that reflective thinking-for-evaluation of *self* was concerned with 'personal', as well as 'ethical patterns of knowing'. Personal patterns of knowing are concerned with the wholeness and the uniqueness of the individual encountered. To be able to establish a therapeutic relationship practitioners need to 'know' themselves. This study found that reflective thinking-for-evaluation can be very painful and indeed it might be the most difficult component to master. It requires a lot of strength and integrity to reflect on, and examine one's feelings and prejudices within the situation. The researcher was at times taken back by the amount of anxiety and mental anguishing that some of the participants shared during the interviews. The harshness of the comments directed

towards self seemed at times to be inversely proportional to their desire to be a caring nurse.

Ethical patterns of knowing are concerned with the moral codes and conduct of the nurse. Without exception, all participants evaluated their actions and responses in terms of 'right and wrong' be it at different levels. Most participants re-examined the situation by looking for alternatives, by exploring whether they could have done a 'better job' if they had taken a different approach.

Gaining Knowledge from Reflective Thinking

While it should be acknowledged that learning is an integral part of experience, of living, the knowledge obtained from this second level, or macro level of reflective thinking, is different from the micro level. At the second level reflective thinking is deeper and the knowledge obtained is not strictly limited to the situation at hand. Rather, such knowledge is usable or transferable to many other situations in, and outside of, nursing practice.

Interestingly, the study found that participants experienced difficulties when asked to *identify* what they had learnt as a result of the experience, and participants often responded negatively in first instance. This research found similar results as Powell's (1989) study: reflective thinking was mainly used to describe and plan nursing actions rather than to contribute to learning and theory formation. The researcher assumed in the first instance that, by asking what participants had learnt from the experience, participants were led to believe that they needed to focus on big gains in knowledge and skills, rather than on the smaller gains that are more typical in ordinary life. Adding such phrases as: 'What did you take away from it?' or: 'What did you make of it?', allowed participants to identify to a certain degree specific gains and insights (see chapter 6).

The second possible explanation, as to why participants found it difficult to recall their newly found gains and insights, was thought to be related to the fact that the participants generally failed to include this specific aspect in their evaluation. While this explanation sounded quite reasonable it didn't appear entirely satisfactory. The transcripts of the interviews indicated that participants used reflective thinking to

make meaning of the situation in order to nurse. Clearly, reflective thinking at this micro-level was concerned with action, with doing things. However, reflective thinking at the second level (the macro-level) was quite different and it could easily be distinguished from the previous level. It unmistakably involved evaluation of the participants' own performance and their own professional as well as personal role within the event. The researcher was surprised and impressed by the thoroughness of this process, as applied by at least some of the participants. Because of this, it didn't seem to make sense that participants couldn't identify the resultant 'learning', especially as it was claimed in the literature that reflective thinking contributed to an informed body of knowledge (Draper, 1991; Emden, 1991; McCaugherty, 1992; Snowball, Ross & Murphy, 1994).

Carr (1981, pp. 54-55) offered the following explanation for this phenomenon when he argued that: "... whereas the objects of theoretical knowledge are something like statements or propositions, practical knowledge is directed towards action ...". Carr maintained that practical knowing is 'knowing how', or 'knowing what to do', and that practical knowledge was wrongly construed as concerning theoretical knowledge. Carr (p. 60) concluded that:

The main difference between theoretical and practical knowledge, then, is that whereas the concern of the former is with the discovery of truths that are adequately supported by reason and confirmed experience, the latter is concerned with the execution of purposes in action, conducted in a rational manner and confirmed by a reasonable degree of success.

This is exactly what Schön (1983) referred to when he argued that there was a mismatch between the propositional theory (technical-rational) and the theory of practice. On a similar note Benner (1984), suggested that theory is 'embedded' in practice, and that there is a barrier between nursing as it ought to be (the theoretical), and nursing as it is practised. Kemmis (1985, p. 143)) maintained that reflective thinking is always action-orienting within a particular context and he noted that: "In no case can reflection be understood without reference to action or context."

Relating these findings to the difficulties participants experienced when asked to express what they had learnt, the researcher concluded that participants were unable to

assess their own learning in 'theoretical' terms as their learning related to the 'practical'. When reflecting, participants did not assess their own learning in terms of consciously reviewing and updating their existing propositional knowledge base, but rather, participants evaluated their gains in terms of the practical. Thus, participants reflected on whether they would do the same thing again under similar, but not necessarily identical, circumstances. Focussing on, and expecting practitioners to 'extract' empirical (theoretical) patterns of knowing might therefore be inappropriate as it ignores other patterns of knowing and in doing this, perpetuate the values characteristic of, and inherent in, the positivistic worldview.

In conclusion it can be argued that reflective thinking-for-evaluation does contribute to learning as it allowed the practitioner not only to examine his/her actions in terms of effectiveness and efficiency, but also in terms of whether the practitioner acted in the client's best interest. The information gained is stored and contributes to the stock of personal/professional categories and patterns that the practitioner will bring into future experiences.

Reflective Thinking-For-Critical-Inquiry

The philosophical shift in the usage of the term *critical* has been discussed earlier in this chapter and will not be further examined here. The concept of *critical* reflective thinking, as it relates to critical inquiry, has been defined by Kemmis (1985, p. 146) as follows:

Critical reflection aims to discover how criteria have come to be accepted, to analyse their historical and social formation, and to organize social action towards emancipation; it serves the ends of society by identifying how our thought and action have been distorted by ideology and redirecting our thought and action to overcome these distortions.

The fruit of reflective thinking-for-critical-inquiry contributes to knowledge that Habermas labelled as '*emancipatory interest*'. The emphasis of reflective thinking at this mega-level is not on situational meaning making as conducted at the micro-level. It also isn't concerned with what the practitioner thinks or does in terms of the rightness of actions in a particular social/nursing context as mentioned at the macro-level. Rather, reflective thinking at this level is concerned with trying to recover and

examine the historical and developmental circumstances that *influence* and *shape* our thinking, ideas, institutions and modes of actions (Kemmis, 1985). The emancipatory interest is concerned with 'freeing' the person from the 'shackles' of taken for granted assumptions, customs, traditions, habits, domination, and with eliminating coercion and self-deception (Habermas, 1974).

While participants posed numerous questions at the micro and macro-levels of reflective thinking, there was no indication that the same was happening at the mega-level. This is somewhat surprising as the study found that at least a number of participants were aware of the power imbalances within their place of work. These participants commented on the unwritten rules that needed to be followed when asking for medical support, and their limited input, or voice, in the decision making process for healthcare delivery. Three participants commented on aspects of managerial decisions that resulted in them being placed in unfamiliar environments, but there was little to no evidence of the use of reflective thinking-for-critical-inquiry.

There are a number of possible explanations as to why this might be so. It could be argued that reflective thinking-for-critical-inquiry uses cognitive processes that are different from, or other than self-questioning. As a result, this study might not be able to demonstrate mega-level reflections. However, even if this were the case, one would still have expected some evidence of reflective thinking at this level to come through in other parts of the interviews.

Another explanation could be the requirement of certain attitudes. Dewey (1933) identified three attitudes (open-mindedness, wholeheartedness, and responsibility) that were prerequisite to reflection as he had conceptualised it. The inclusion of reflective thinking-for-critical-inquiry might require additional attitudes to be present as well. While it is not in the scope of this study to do an in-depth analysis regarding these types of attitudes, it is suggested here that reflective thinking at this mega-level demands:

- A 'sceptical attitude' towards all taken-for-granted views. This attitude requires the person to have an inquiring mind in order to examine and expose the reasons for existing rules, regulations, procedures, and situations;

- A 'sensitive attitude' towards social justice and equity. This attitude requires to person to have 'feeling' for the historical struggle and injustices of the past, and a genuine desire and commitment to put things right;
- A 'political attitude'. This attitude requires the person to have the 'guts' to stand up and be counted, to challenge the system in order to transform the situation.

To assume that all practitioners, because of their professional status or age, possess these attitudes is incorrect. Because reflective thinking-for-critical-inquiry is *action* in order to transform even the most taken-for-granted view, critical reflectors are likely to be 'mountain-movers' who change the social-political-cultural-historical landscape. In ordinary life there are few such 'movers', the majority of people are 'mountain-watchers' that might struggle to adapt to, or even resist, changes in the landscape that surrounds them.

Reflective thinking-for-critical-inquiry occurs at the mega-level and does not focus on the situation at hand per se. Rather, reflection at this level examines those underlying structures and systems that control and influence/shape every aspect of social and professional life. The critical social theory paradigm maintains that these structures and systems serve the interests and ideologies of the dominant groups in society and give rise to inequities and injustices. Thus, *critical* reflective thinking attempts to expose and transform these inequalities in order to create a fair and more just society. It is argued here that reflective thinking-for-critical-inquiry is inherently more removed from 'the practical' than the lower two levels of reflective thinking, and as such is more akin to 'armchair' reflection, which typically does not occur in 'the heat of the moment'. This study assumes that the higher the level of reflective thinking the more time and energy is required due to the wider focus. Many narratives repeatedly indicated that participants perceived themselves as having insufficient time to reflect, which might explain this study's finding that practitioners mainly attended to the first two levels of reflective thinking.

In summary it can be stated that reflective thinking is a common cognitive activity that may occur at three different levels. Among a number of mental activities involved in reflective thinking, discourse-with-self- was identified as an important aspect of

reflective thinking. Participants claimed that this internal dialogue with self assisted them to guide, structure, and stimulate their thought processes. By temporarily 'fragmenting' the situation of inquiry into smaller consecutive micro-moments, and by focusing on self-questioning, the research was able to expose the various foci of reflective thinking. Analysis of self-questioning activities identified three hierarchical levels of reflective thinking. Figure 7.3. displays the estimated proportional representation of foci in regards to reflective thinking in nursing practice. The broken lines between the different levels reflect the potential of reflective thinking to 'flow' from one level to the next and vice versa. Figure 7.3 also illustrates the relationship between the three foci of reflective thinking and the three types of 'interest' as identified by Habermas (1972).

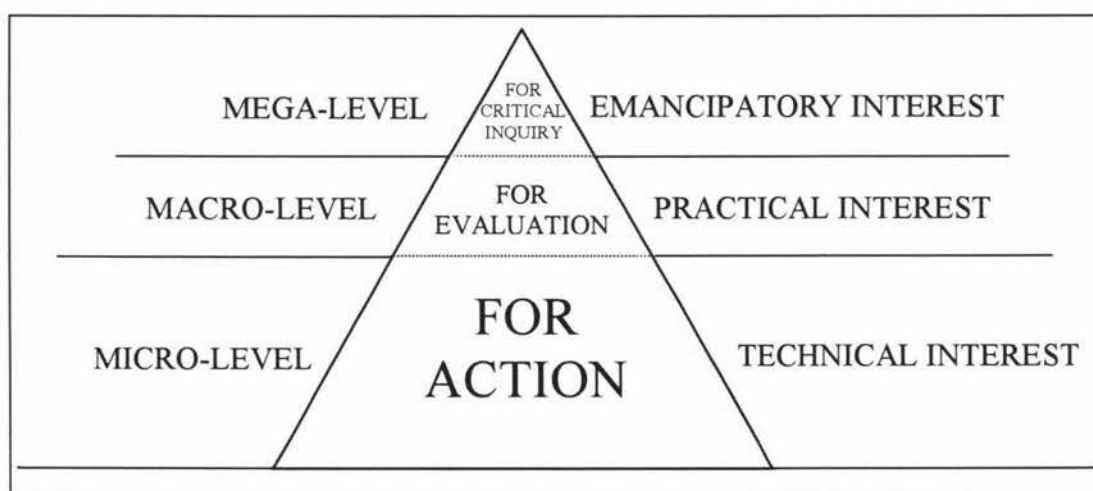


Figure 7.3. The reflective thinking hierarchy.

At the lowest level reflective thinking is used to make sense or create meaning in order to respond and act in an informed/intelligent manner to perceived stimuli from one's environment. At the second level reflective thinking is concerned with a deeper, and more holistic, understanding of the experience and one's own role within that particular context. Reflective thinking-for-evaluation closely resembles the sixth level of Bloom's (1956) taxonomy, which referred to one's ability to make a judgement about the value of the method or action, ideas and solutions. The third and highest level of reflective thinking transcends from the actual experience in order to expose ideological and hegemonic conditions that serve the dominant class. As noted, the current study found no evidence of reflective thinking-for-critical-inquiry.

REDEFINING THE CONCEPT OF REFLECTIVE THINKING

The findings of this research require a re-examination of the operational definition of reflective thinking as set out in chapter 2. Participants engaged in reflective thinking when confronted with a gap that required them to create meaning of the situation/event. While the operational definition treated reflective thinking as one cognitive activity, this study demonstrated that reflective thinking consists of a range of mental activities. Furthermore these activities, which include strategies such as comparing and contrasting, perceptual categorisation, and pattern recognition, use past experiences and therefore tend to be conservative in approach rather than creative. Thus, the individual is more likely to apply a previously used remedy as opposed to something entirely new. The operational definition also proposed that reflective thinking led to a changed, or new, perspective that influenced future behaviour. This study found that participants first and foremost engaged in reflective thinking in order to *act* in the situation at hand in a well informed, or intelligent, manner. Secondly, but to a lesser extent, the participants engaged in reflective thinking to evaluate the situation in its totality as well as their own role within it. Lastly, although no evidence was found for this, it is assumed that some individuals might critically inquire into the wider context underlying health and wellness, for example the hidden power structures, the allocation of resources, and equity issues related to the delivery of health care services. These findings have thus led to the re-definition of reflective thinking as follows:

Reflective thinking is a highly adaptive and individualised response to a gap-producing situation and involves a range of cognitive activities in which the individual deliberately and purposely engages in discourse-with-self in an attempt to make sense of the current situation or phenomenon in order to act. Furthermore, reflective thinking contributes to better contextual understandings and as such may influence future behaviour.

DEVELOPING A PROCESS MODEL OF REFLECTIVE THINKING

This study demonstrated that the participants used reflective thinking in their nursing practice. Any model that depicts reflective thinking should incorporate the three different levels of reflective thought that contribute to increased personal and professional 'knowing', as well as the dynamism that is inherent in such a process.

Figure 7.4 represents the full 'spiral' of reflective thinking. Starting off with each individual having unique pre-perceptions as a result of 'personal baggage', the individual comes across an experience or event that requires him/her to create meaning in order to (inter)act. A range of mental activities, called reflective thinking, takes place ranging from comparing and contrasting to discourse with self and self-questioning for the purpose of creating meaning of the event in order to decide on the appropriate action(s) to take. Furthermore, the individual might continue his/her reflective thinking and focus on the next level and so on. The reflective thinking model is a spiral that leads to ever increasing amounts of experiential insights and 'knowing', which feeds back into the 'system' as indicated by the arrow that returns toward 'Awareness & Baggage'.

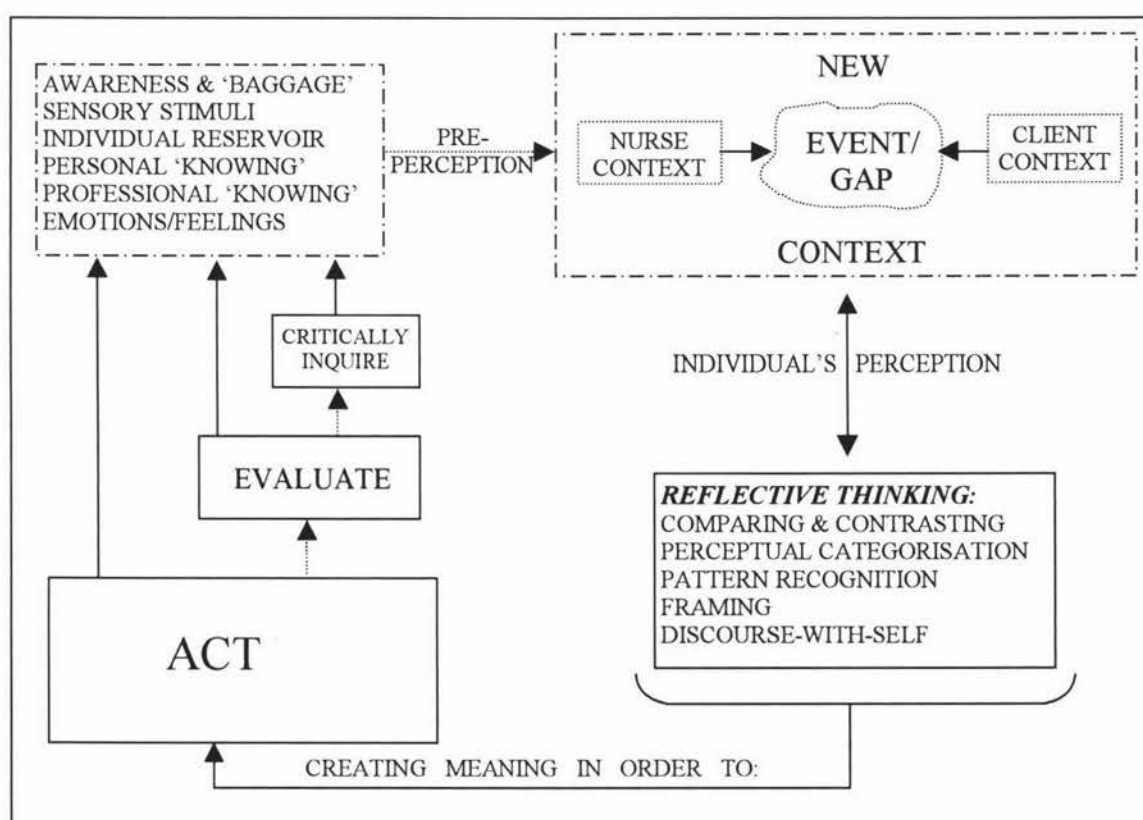


Figure 7.4. Visualisation of a dynamic process model for reflective thinking.

REFLECTIVE THINKING: IMPLICATIONS FOR NURSING PRACTICE

One of the participants recently asked how the research was getting along and added to her question the comment: "I hope that it is something useful." Indeed, the merit of a theory is found in its practical implications and usefulness in solving problems of

the discipline, but as Fawcett (1984) has pointed out, the expectation that all nursing research can be applied immediately rests on a misunderstanding of knowledge utilisation. This study had two major objectives; the first one was to clarify the concept of 'reflective thinking', while the second objective was to explore how nurses think reflectively, as well as the focus of their reflective thinking while in clinical practice. There was an underlying assumption that defining the concept of reflective thinking, and illuminating its related processes would reduce the confusion surrounding this concept and contribute to a better understanding. Furthermore, having an understanding of these processes and specific factors that help, or hinder the nurse to learn from experiences in the clinical field might assist us to identify and explore ways in which reflective thinking can be stimulated.

Theory or Practice?

While calling for volunteers to take part in this study, some potential participants indicated that they '*didn't like reflection*' because it was just one of those theoretical things, far removed from the real world of practice. If anything, this study contributes to the de-bunking of the concept of reflective thinking as something 'theoretical'. Not only is reflective thinking a *practical* activity, it is also an essential cognitive activity in order to make sense of the experiences-in-the-world.

The concept of reflective thinking is extensively used in contemporary nursing literature. However the literature tended to define the concept mainly in terms of three separate but related components namely reflection-in-action, reflection-on-action, and reflective practice. The outcome of this study questions the importance, or even the need to distinguish between the individual's ability to think reflectively-in and/or on-action. It is argued in this study that human beings think reflectively because they have to, in order to make sense and respond/act to their immediate environment. At its most basic level, the function of reflective thinking is to 'translate' a whole array of stimuli into something that makes meaning for the individual and that enables the individual to act intelligently in the situation. Reflective thinking is thus 'practical' because it arises out of, and contributes to, making sense of 'real world' experiences in order to act. Hence this study introduced the notion of reflective thinking-for-action at its most basic level. Reflective thinking-for-evaluation contributes to practical knowing in that it enables the practitioner to explore the wider context as well as one's

own professional and personal role within the experience. The findings of this study suggest that '*Reflective nursing practice*', a term often used in the nursing literature, occurs when the practitioner reflects both at the micro and macro-level, *and* allows the obtained insights and changed perspectives to influence future nursing practice.

The researcher avoided all the terms related to '*reflection*' in the interviews to avoid influencing participants in any way. What's more, some participants indicated at the first meeting that they didn't know much about reflective thinking, yet the study demonstrated that all participants used reflective thinking to make sense of their world, and to monitor and evaluate their own actions. As such, the findings are consistent with the study by Boyd and Fales (1983) who noted that participants did use reflective thinking even though they hadn't labelled their activities as such. The fact that all participants used reflective thinking first and foremost to make sense in order to 'keep moving' justifies the question as to whether learning is the focus or merely an 'by-product' from reflective thinking at the micro level.

Being Non-Judgmental

The notion of pre-perception has important implications for nurses especially as it is often maintained in nursing education that nurses should be non-judgmental. Past experiences, cultural and social background, all contribute to one's individual reservoir, which in turn influences how new situations are perceived in first instance. This personal reservoir is responsible for 'taken for granted views', as well as assumptions. It is what experience is all about, and it allows the individual to create some sort of stability or permanence within his/her world. Nurses, like everybody else, carry their reservoir with them and they can not be 'non-judgemental'. Rather, nurses should become aware that they are the creators and the owners of their own perceptions, which make them respond and act accordingly. Gadamer (1975) maintained that pre-judgement is unavoidable since it is an epistemological feature of the theory of interpretation. In every situation the interpreter will always start with an existentially defined position that will lead him/her to pose particular questions and perceive certain meanings. Making practitioners aware of the processes involved in reflective thinking, especially as it relates to self-questioning, might enable practitioners to focus on and examine the type of questions they ask (or do not ask) themselves. By doing this practitioners can uncover their own assumptions, values,

and beliefs, within that particular situation. The old adage that nurses have to be non-judgemental is incorrect, fundamentally flawed and dangerous, as it doesn't demand of the nurse to look inwardly. Only if one is aware of one's own judgmental attitudes, is one able to put mechanisms in place to control and/or limit these, while appreciating and celebrating the uniqueness that is present in each individual.

From Problem-solving to Problem-posing

This research demonstrated that participants did use self-questioning extensively in non-routine situations even though they were not always aware of engaging in it. If practitioners could be encouraged to consciously apply this cognitive strategy of self-questioning, and extend its use to include routine situations of nursing as well, a major change could occur with practitioners taking a more pro-active look towards their own nursing practices. Increased self-questioning would result in a shift of attention from problem solving to problem posing. Problem solving tends to be 'reactionary' in its approach, as the practitioner focuses only on the problems at hand in the particular situation in which it is actually identified. Practitioners might experience such problems as a personal dilemma without realising that others struggle with identical problems. Problem posing through self-questioning is more anticipatory in that it doesn't require for a problem to be actually present. Therefore problem posing can be more generalised and broader in its approach, looking ahead and preventing potential problems from occurring. Problem posing in this sense could also be used to examine taken for granted policies and procedures by 'testing' them with hypothetical questions. In doing so, the practitioner is able to redress potential issues before they become a problem. What's more, the practitioner is able to share his/her questions with colleagues and engage in dialogue. Knowledge gained from problem posing is more likely to be transferable to other situations, and settings, than those gained from problem solving. The process of focusing consciously on one's own questions increases the individual's capacity to learn from *all* experiences. This study indicated that especially reflective thinking at the macro-level enabled practitioners to monitor their personal and professional performance. Reflecting on one's own practice is self-empowering as it adds to personal understanding and control. The individual is thus both shaped by, and the shaper of his/her world.

The Theory-Practice Gap

At present there is no 'general' nursing theory that can be applied to the practical without modification or 'fine-tuning'. This problem of 'fit' has been identified by a number of authors who have commented on the existence of a perceived 'gap' between nursing theory and nursing practice (Thompson, 1987, Wilson-Thomas, 1995). The need to modify the 'theoretical' to fit the 'practical' is partly due to the highly abstract and generalised nature of most theoretical models (Greenwood 1984, Hardy 1988, Miller 1985, and Reed & Procter 1993), and partly the result of the contextual nature of nursing situations that do not easily fit into a known theory (Baer, 1979). Jarvis (1987, p. 200) was very accepting about the existence of the theory-practice gap by stating very bluntly that: "... it would only be the most mindless of individuals who would have attempted to apply theory learnt in classroom unthinkingly to a practical situation." The existence of a theory-practice gap is nothing new and has been described in different ways by different authors. Argyris and Schön (1974) described the theory-practice gap extensively when they maintained that professionals dealt with two kinds of knowledge:

- Firstly, there is knowledge based on a shared understanding among professionals of what is appropriate practice. This knowledge can be learnt independently of the context to which it applies and is equated with the principles underlying practice rather than with a system of interrelated hypotheses. They classified this shared professional knowledge, as 'espoused theory'. Espoused theories are non-contextualised and often technical-rational in nature.
- Secondly, there is knowledge that is based on the professional's practical experience in the clinical setting. Here, the nurse possesses personal intuitive nursing knowledge and understanding. Often this is referred to as 'having a real feel' for the situation. Argyris and Schön (1974) labelled this type of knowledge as 'theories-in-use'. Theories-in-use are highly contextualised knowledge structures that enable nurses to resolve practical problems by initiating appropriate actions in the particular situation.

One could thus argue that there are two types of 'theory', the 'theory of theoretical nursing' and the 'theory of practical nursing' both of which are characterised by different types of knowledge. Obvious similarities can be detected between Argyle and Schön's types of theory, and the writing of Habermas (1972) regarding types of knowledge with espoused theory resembling the technical interest, and theory-in-use the practical interest. Espoused theories and theories-in-use are not necessarily incongruent, and they need not be seen as a theoretical versus practical *dilemma*, rather it is a question of which mode/solution fits best in this particular situation. Practitioners face everyday situations that are new and unique to them personally and to nursing in general. Espoused theory is not so much applied to explain such situations but rather, such theory is transformed into theory-in-use in order to make sense of the unique situation at hand and to act appropriately.

Many nursing articles discuss the topic of learning from experience but none mention the fact that this learning is quite a 'scary' business, especially for students of nursing and novice nurses. This study maintains that learning from experience requires courage on behalf of the learner because he/she is required to shift from reliance on abstract, analytic rule-based thinking (espoused theory), to thinking based on clinical reasoning using past concrete experiences (theory in use). The ability to do this signifies the move from a beginning practitioner to advanced, competent, and expert practitioner. The expert nurse is thus not 'just a nurse with a lot of experience', but a practitioner who can freely move between the two types of knowledge, enabling him/her to select and transform knowledge most appropriate to the situation. Both Schön and Benner's writings confirmed that it is this ability to move between theory and practice that ultimately results in the growth of the practitioner from beginner/novice to expert. Chinn (1986, p.29) noted that: "As expertise is gained, the theory is refined and taken over by practical knowledge so that the theory is elaborated, changed, or discarded." Chinn maintained that the highest level of skilled performance was achieved when the practitioner used past concrete experiences as a 'perceptual lens'. Interestingly, participants in this study indicated that using such a perceptual lens was most likely to occur during reflective thinking-for-evaluation. This finding is important as it suggests that reflective thinking at the macro-level is a fundamental requirement for professional growth. Finding ways to encourage

reflective thinking at this level is a challenge that needs to be addressed in order for nursing to move with confidence into the new millennium.

Evidence-Based Practice

The notion of accountability and responsibility for one's professional nursing practice has received new impetus with the discussions on evidence-based practice. This latest concept is currently widely discussed in the nursing literature (Hancock, 1996; Kitson, 1997; Naish, 1997; Walsh, 1997). As a result of changes in the economic policies as well as changes in societal expectations, practitioners have come to realise that resources are limited and finite, and that issues of professional accountability are more important than ever. Practitioners need to justify the appropriateness and validity of their nursing interventions, and demonstrate within an increasingly competitive health care system, the value that professional nursing input has for society at large. Evidence-based practice relies on the increasing use of research findings to support treatment and clinical interventions. Accountability requires the nurse to be able to give an explanation of, and justification for his/her nursing practice. It requires careful client assessment as well as evaluation of interventions in order to ensure cost-effective use of available resources. Evidence-based practice begins by the practitioner questioning self about clinical procedures, policies, and taken for granted views, as well as careful monitoring of his/her own practice in terms of professionalism and effectiveness as part of a continuing drive to provide best client care. Reflective thinking at the micro and macro levels plays an important role in this process.

While the discussion has mainly focused on the individual practitioner, it must be self-evident that employers also play a major part in stimulating *best nursing practice*. Reflective thinking is important to create meaning in order to be able to make informed decisions based on evidence and careful judgement. Reflective thinking might also contribute to increased pro-active nursing, resulting in more effective use of the limited resources available. Employers can support reflective thinking by putting in place measures that stimulate and encourage reflective thought. Lack of time is a major issue that has been identified by most participants as an important factor that constraints reflective thinking. The need for support from senior colleagues was another factor. Employers need to ensure that each and every area has the right

'skill mix' of experienced and less experienced nurses. Furthermore, the setting up of clinical supervision and/or preceptorship structures might prove invaluable in order to reduce stress levels and to create an environment that is conducive for reflective thinking.

IMPLICATIONS FOR NURSING EDUCATION

Learning and mastering the practical components of nursing is at the heart of professional education (McCabe, 1985). The importance of clinical learning is reflected in the amount of time students of nursing spend in a variety of clinical settings as part of their educational programme. Experiential learning through reflective thinking has been advocated as the most appropriate way to master a practice profession such as nursing (see chapter 2). However, whether this applies equally to students of nursing has as yet not been demonstrated in the nursing literature. Reflective thinking requires, beside a conducive environment, a certain amount of fundamental propositional knowledge, an ability to compare and contrast, to recognise patterns and to categorise perceptions in order to construct a frame. All this requires repeated experiences to build up a repertoire of situations and events. It is suggested in this study that reflective thinking in students is possibly less effective for learning because of the following reasons:

- students are likely to be less comfortable in a clinical area due to unfamiliarity and short placements. The resulting increase in anxiety reduces the ability to reflect and learn from the experience (Schön's virtual world versus real world);
- students are likely to have less instrumental knowledge than qualified staff;
- students have less practical nursing experience than qualified staff;
- students can not as yet move 'freely' between the theoretical and the practical knowledge;
- the lower average age of students is likely to contribute to less life experiences;

Although the nursing literature frequently discussed 'critical' reflective thinking, thereby creating the suggestion of it being 'the ultimate' in thinking, the occurrence of reflective thinking-for-critical enquiry wasn't demonstrated to any significant degree in this study. To assume or expect that inexperienced practitioners, who spend only

short periods of time in unfamiliar clinical environments, engage in *critical* reflective thinking is rather pretentious and unrealistic. Burrows (1995) suggested that students under the age of 25 might lack both the cognitive readiness and the required experience for mature *critical* reflective thinking. Ross (1989) found that the level of *critical* reflection in students of teaching didn't change significantly over a three-year period. Using students' journal entries to study *critical* reflective thinking, Richardson and Maltby (1995) found that 94% of reflections occurred at the lower non-critical levels of reflective thinking. What's more, even to assume that reflective thinking can be engaged in at will is incorrect as the thinking process itself is socially constrained. This was illustrated by the participants' inability to reflect in a number of micro moments due to the perceived lack of time to do so, or because of expectations of others, or the apparent need for support from colleagues or more senior staff. Hence, reflective thinking may well be conformist in nature. Schön too was aware of the social constraints placed on reflective thinking and developed for this reason the concept of *practicum*, a virtual world of practice conducive to reflective thinking.

Learning through Reflective Thinking

Despite the fact that learning from reflective thinking might not be as 'straight forward' as is often suggested by the literature, there is no reason to reject it all together. What is needed is a careful appraisal of what is currently being done to encourage reflective thinking in order to find ways and strategies that might be more effective. Given that there are numerous experiences, it is likely that, through deliberate practise, one is able to improve one's skills in reflective thinking. Care should be taken however, not to assume that improved skill in reflective thinking equals learning, equals improved nursing practice. Greenwood (1993b, p. 1999) for example, argued that: "... reflective practice can reinforce rather than eliminate inappropriate action tendencies; in addition, this could serve to consolidate rather than diminish the theory-practice gap in nursing." Schön too was well aware of this and advocated for a *model of coaching* that was based on expert role models working side by side with students. Furthermore, Schön realised the importance of the right environment for learning to take place hence his notion of *practicum* as a 'special' place of learning. As can be seen from the participants' experiences, learning through reflective thinking is certainly not something that happens 'automatically'; rather it requires active involvement and a responsible attitude. Dewey (1933) insisted that it is

attitude, rather than knowledge of the best forms of thought, that is important. For learning to take place, the individual needs to have the right attitude such as open-mindedness, but also curiosity and orderliness. The individual also needs to be in a clinical environment that is supportive towards the needs of the learner and that encourages/creates opportunity for learning. In summary, even under the most 'ideal' circumstances it remains important to realise that:

- Students are likely to focus their attention initially only on the micro-level in order to create meaning of the situation. Reflective thinking at this first level is most closely linked with, and depends very much on instrumental knowledge;
- Learning from experience is not inevitable. Dewey (1933, p. 25) warned educators about this when he argued that although: "... all genuine education comes about through experience, this does not mean that all experiences are genuinely or equally educative For some experiences are miseducative." Furthermore it needs to be emphasised that learning might be severely impaired, if not impossible, without a certain degree of appropriate instrumental knowledge (espoused theory) that forms the starting point from which to reflect;
- Nurse educators and experienced practitioners in the field need to monitor reflective thinking at this level, as well as guide students to higher levels of reflection in order for students to take more responsibility for their own learning, and to be creators of their own practice. Students do this by seeking active feedback on their performance, by identifying, focussing on, and developing the skills and knowledge that constitute professional practice. It is the responsibility of educators and preceptors to 'travel side by side' with students and to provide feedback that is constructive for further learning;
- Nurse educators need to develop strategies that encourage and entice students to engage in reflective thinking, rather than continue with artificial and unnatural procedures that alter attitudes and tend to turn students away from reflective thinking;

- There is currently no nursing research published that provides evidence that learning has occurred as a result of reflective thinking.

Encouraging Reflective Thinking

Dewey (1933, p.35) asserted that: “. . . we cannot learn or be taught to think, we do have to learn *how* to think well, especially *how* to acquire the general habit of reflecting.” Goodman (1984) concluded that educating students to become thoughtful, questioning and more consciously reflective, is a formidable task given the technical emphasis found in many clinical areas, and the students' desires to meet clinical demands. Indeed, changes in staffing levels and increased workloads combined with altered work methods place effectiveness and time management at a premium. To develop strategies to encourage reflective thinking under those circumstances is a formidable task indeed.

The number and frequency of publications in the nursing literature concerning journaling suggests that it has become the tool of choice to encourage and facilitate reflective thinking. However, the activity of journaling remains rather problematic, while there is little to no evidence that the use of it develops and/or promotes reflective thinking (James & Clarke, 1994). At present there appears to be no consensus among educators in regards to the expectations and/or standard of journaling. Journaling means various things to different people, and this can be very confusing for those who receive different instructions or try to comply with different expectations. Analysis of the content of journals to determine the quality or level of reflective thinking should be questioned, as the outcome is very unreliable due to varying expectations and lack of consensus. Furthermore, if journal-writing, originally intended to encourage reflective thinking, becomes a tool to assess ‘critical thinking’ or ‘reflective learning’, the emphasis changes from the person’s ability to think to his/her ability to express thoughts within the constraints of the written word. As journal-writing requires considerable language skills, it disadvantages people for whom English is not the first language, and people from cultures with a strong oral tradition.

Journal entries are not the product of neutral viewpoints from which students can study and/or understand their beliefs and values as objects, since students/practitioners

always operate within their personal framework of beliefs and values. How is one able to validate the correctness of one's conclusions and knowledge gained? If journals are used to facilitate learning, then the entries should function as a catalyst for dialogue with peers, preceptors and nursing educators, rather than be an end-product. Giddens (1989) argued that people maintain a 'theoretical understanding' of the grounds of their activities and are usually capable of elaborating discursively as to why they acted the way they did. The emphasis should thus not be on the 'writing' but on the 'sharing' of the information gained from reflective thinking as it must be apparent that learning and new knowledge deserve more emphasis, and should be monitored more closely, rather than left to the student/novice nurse. For the student/novice nurse the sharing of the outcomes of reflective thinking with (experienced) others, is the only way open to evaluate, validate, and refine the conclusions reached as a result of internal processes. Consequently, for nurse educators and expert nurses there is a requirement to focus upon knowledge of practical theory through practice, as well as developing their skills to facilitate student/novice acquisition of experiential knowledge.

Sense-Making Model as a Framework for Reflective Thinking

"Reflection is most profound when it is done aloud with the aware attention of another person" (Knights, 1985, p. 85). Indeed, this study demonstrated that the sharing of an event in a conducive environment provided participants with additional insights and knowledge that they would not have gained otherwise. The role of the researcher during the interviews was that of an attentive listener and there was no need to provide the participants with any answers. Johns (1996, p. 40) maintained that: "The worth of any reflective model of nursing is its power to enable nurses to realise their beliefs about nursing as everyday practice." This author asserts that Sense-Making might be such a model, as it is foremost a coherent set of concepts that incorporate the natural tendencies of human beings to create meaning when faced with perplexity, uncertainty or doubt. Dewey (1933) claimed that reflective thinking is a *natural habit* that grows out of native tendencies. He warned that striving to impose some unnatural habit (journaling?), instead of directing native tendencies towards their own fruition, is not only a waste of time but might even do worse damage to the individual. There is plenty of anecdotal evidence that students/nurses do not like to journal for a variety of reasons. Requesting journals under those circumstances can

only be very disempowering for the individual. More importantly, when journaling and reflective thinking are linked together, negative feelings towards journaling are equally transferred to reflective thinking. Remember the potential participants who indicated that they '*didn't like reflection*'? Nursing lecturers need to concentrate on exploiting the natural capacity for reflective thinking, rather than attempting to artificially induce it (Lavelle, Patterson, & Iphofen, 1997). Nurses are naturally concerned for the welfare of their clients as could be seen with the participants in this study. As a result of this, nurses have generally a need to share their worries, concerns, discoveries, and victories with a trusted colleague. Some participants decided to take part in this study because they felt a need to air some of the things that had bothered them for a long time. Attentive listening, and encouraging individuals to get more consciously in touch with their own self-questioning helped them to find answers and resolve personal dilemmas. Taking a 'fresh' look at situations by 'taking small steps at the time', examining the type of questions and confusions connected to the situation, and exploring the 'helps and hinders' to create meaning and (deeper) understanding, provided a solid structure for reflective thinking. As this study demonstrated, the exploration of self-questioning not only exposed reflective thinking, but it also revealed the focus of, and even different levels within reflective thinking. Feedback from the participants in this study suggested that the use of the Sense-Making method as a framework for reflective thinking was very helpful for the following reasons:

- the application of the Sense-Making method was considered 'simple' and 'logical' as it focussed on the situations of doubt and perplexity;
- it allowed for complex situations to be broken down into manageable but significant 'chunks' (micro-moments) while ensuring that the holistic nature of the situation was safeguarded;
- it allowed for a complex situation to be treated as multiple situations thus enabling the reflective thinker to examine the situation more 'deeply' as it evolved and unfolded;
- the use of micro-moments reduced the risk of overlooking important aspects within a complex situation;

- micro-moment analysis revealed more accurately the reflector's own input and influence in the situational context, thus allowing more insight into personal beliefs, values, and behaviours.

This research has demonstrated that the Sense-Making method was very useful in facilitating participants to create meaning in difficult or complex situations. By focusing on the individual's perceptions, internal conversations and self-questionings the locus of control remained firmly with the participant. Recall of reflective thinking was encouraged and intensified by 'breaking up' situations into a number of micro moments, a process that was well received by participants. Rather than 'pushing' unpopular or disliked methods such as journaling, this study argues that there is an urgent need to explore new ways to encourage reflective thinking. What is needed is a method that builds on the 'natural' tendencies of human meaning making. The Sense-Making method appears to be a very promising approach capable of achieving just that. By using the Sense-Making method, clinical preceptors and nursing lecturers are able to expose the student's self-questioning and guide his/her reflective thinking from the micro to the macro level.

LIMITATIONS OF THIS STUDY AND SUGGESTIONS FOR FURTHER RESEARCH

All research has its limitations and this study is no exception. The use of a qualitative research approach allowed an in-depth exploration of reflective thinking and the type of issues practitioners reflect on in context of the nursing setting. The study is limited however, in terms of the ability to generalise the outcomes. Typically, the worth of qualitative methods is found in their ability to isolate and relate factors within the phenomenon under study in order to increase one's understanding of it. Eventually, this increased insight and understanding may contribute to further research leading to the development of a general theory.

Another limiting factor is the small number of participants taking part. Participants for this study were recruited from three hospital institutions belonging to two Crown Health Enterprises. It is acknowledged that a larger group of participants from a wider range of clinical settings, as well as from a wider geographical area would have

provided a richer pool of data. The fact that the participants self-selected to take part in this research might have resulted in a sample that is not necessarily representative of the wider nursing profession. It is also conceivable that the participants represented a more committed and articulate group of nurses.

The scope of this research as well as the limited time available resulted in the author having to make choices as to what aspects of the data to include, and which ones to leave unattended. It would have been interesting to explore some of the data concerning the participants' beliefs related to performance issues, their use of the concept of 'intuitive' thinking, as well as the effects of higher management decisions on their day to day nursing practice. Although reflective 'thinking' can not be observed in external behaviour, it is suggested that this research might have been enriched if the researcher had been present as an observer at the time of the event.

While this research clarified the concept of reflective thinking, and explored how qualified nurses think reflectively as well as what the focus of their reflective thinking clinical practice was, the study also produced a whole range of new questions that deserve exploration in future by those interested in reflective thinking and/or experiential learning:

- How do individuals gain the information necessary for isolating and learning concepts?
- How is information, gained from relevant experiences, retained so that it may be used in the future?
- How does the individual determine to pay attention to some information while ignoring other aspects (selective attention)?
- If reflective thinking is strongest in non-routine situations does this mean that experienced nurses reflect less than novice nurses?
- Does reflective thinking ultimately benefit client care and if so how?
- If reflective thinking improves the quality of care and benefits the recipients of that care, how can employers encourage and support reflective thinking of their workforce?

FINAL REFLECTIONS

Reflective thinking is an under-researched phenomenon in nursing practice. Furthermore, the information available on this subject often lacked clear definitions of the terms and concepts used. This study defined reflective thinking and selected a qualitative research approach called 'Sense-Making' in order to explore how nurses used reflective thinking as well as the focus of it in clinical practice. Because the Sense-Making method had not been used in New Zealand previously, obtaining sufficient information in order to understand and use the method confidently turned out to be a 'mini research' project in itself. Not knowing what to expect or where to go 'from here', resulted in many gap producing situations leading to discourse-with-self and self-questionings. Despite the initial difficulties of obtaining sufficient in depth information, the application of the Sense-Making method has been an excellent and most rewarding learning experience.

The research findings demonstrated that the participants do not enter a nursing situation 'empty handed'. Rather, each nurse practitioner carried their own personal reservoir of cognitions, assumptions, abilities, experiences, and emotions/feelings, resulting in a unique 'pre-perception' of the event. All related information obtained through sensory receptors, underwent cognitive manipulation in order to create meaning and understanding. Reflective thinking is a combination of mental activities that included comparing and contrasting current situations with previous experiences, perceptual categorisation and pattern recognition, framing, and self-questioning. This study discussed three different foci of reflective thinking that are considered to be hierarchical in structure. The research findings indicated that participants used reflective thinking foremost to create meaning, to describe the particular situation at hand, and to plan nursing actions. Thus, at the most fundamental level, practitioners first and foremost think reflectively in order to *act*. At the second level the focus was on reflection to *evaluate*, whilst at the highest level reflective thinking is assumed to centre on '*critical-inquiry*'. Although reflective thinking was claimed to be an effective tool for learning, the participants in this study experienced difficulties in identifying or isolating newly gained knowledge. The use of Micro-Moment Time-Line interviews, a method unique to Sense-Making, was very helpful. The fact that events could be 'fragmented' temporarily for analytical purposes, while safeguarding

the contextual wholeness, contributed to Sense-Making being an effective qualitative research approach for complicated contextual nursing situations. As was demonstrated in this study, it also made Sense-Making particularly suitable for encouraging reflective thinking in nursing practice.

APPENDICES



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APPENDIX ONE

Request for volunteers

What is reflective practice?

My name is Bert Teekman and I am currently employed by the Faculty of Nursing and Health at the Manawatu Polytechnic, Palmerston North. I am researching reflective practice as part of the requirement of a Master's of Arts in Nursing. The concept of reflective practice has received considerable attention, especially in the literature of teacher education, and more recently in relation to the desire to develop reflective nurse practitioners. Reflective practice appears to be an exciting tool for mastering a complex profession such as nursing. However, the concept of reflective practice remains problematic owing to a lack of clarity as to what reflection is, and how it relates to everyday nursing practice.

I am seeking eight to twelve nurses working in clinical practice, preferable with a minimum of two years clinical nursing experience, who are willing to share their thoughts and experiences regarding their practice. You are not required to know anything about reflective practice! If you are a registered nurse, I would like to invite you to consider participation in the above-mentioned research. Your input into the research is very valuable, and would be in the form of two to three tape-recorded interviews of 45 to 60 minutes each, at suitable times between December 1996 and March 1997.

My research supervisor is Dr Julie Boddy, Department of Nursing and Midwifery, Massey University, Palmerston North. If you consider taking part in this research, or would like to hear more about it, please do not hesitate to contact me at:

Faculty of Nursing and Health
Manawatu Polytechnic
Private Bag
Palmerston North
Ph. (06) 3500010, ext. 8219
Home Ph. (06) 3546858

You may also contact my supervisor, during office hours, concerning this research:

Dr Julie Boddy
Department of Nursing and Midwifery
Massey University
Ph. (06) 3569099

Thank you for reading this explanation sheet. I am looking forward to hearing from you.

Bert Teekman

APPENDIX TWO

What is reflective practice?

INFORMATION SHEET FOR PARTICIPANTS

Thank you very much for requesting additional information and for considering to take part in this research project. This research focuses on reflective nursing practice, as I am interested in finding out what this is.

If you are a practising nurse, preferably with two years or more clinical nursing experience, you would be an ideal participant. According to Boyd and Fales (1983), most people in clinical practice engaged in reflective practice but do not realise this. Your part in the research consists of sharing one or two events/incidents/situations which occurred during the course of your normal work, and your commentary will be the basis for the data of my masterate thesis. I am interested in everyday events in your nursing practice, and to help you recall and discuss the events as vividly as possible you might like to maintain a journal. A journal is similar to a dairy, it records your reflections on your clinical practice. I am happy to provide you with a free journal. You choose which events you write about, and how much. It is up to you whether you show your journal to me, or whether you give me a copy of your entry. I will not use any part of your journal unless you give clear consent for me to do so. The sharing sessions are not intended to be difficult or stressful, there is no right or wrong answer and you remain in control of what you want to share and how much. If anything, the sessions are an opportunity to share 'things nursing' with a colleague who takes an interest in your clinical practice.

I believe that two or three 45-60 minute sessions is sufficient. The second session, and for some a third session, serves to further explore your reflections on practice.

The sessions will be audio taped. Code-names will be used to ensure anonymity, and the researcher, as well as the research supervisor and transcriber, are bound by the confidentiality clause. All tapes and transcripts will be destroyed at the completion of the study or (optional) returned to the participants. Interview sessions will take place at a time and location suitable and convenient to you.

Participation in the research is entirely voluntary, and written informed consent will be sought prior to the interviews taking place. All participants have the:

- Right to decline to participate.
- Right to refuse to answer any particular question or to withdraw from the study at any time.
- Right to ask any questions about the study at any time.
- Right to provide information on the understanding that your name will not be used.
- Right to request access to a summary of the findings of the study when it is concluded.
- Right to agree to participate in the study under the conditions set out on this sheet .

You have at all times access to the tapes and/or transcripts, and have the right to withdraw at any stage during the research.

Please do contact me if you have any questions or require additional information.

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APPENDIX THREE

What is reflective practice?

CONSENT FORM

I, _____, have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my full satisfaction, and I understand that I may ask further questions, if I wish to do so, at any time.

I agree to participate in this study on a voluntary basis. I have the right to withdraw completely or partially from the study at any time, and I have the right to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will not be used without my permission.

(The information obtained will be used only for this research and publications, seminars/research forums, arising from this research project.)

I agree to the interview being audio taped.

I understand that I have the right to ask for the audio tape to be temporarily turned off at any time during the interview.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: _____

Name: _____

Date: _____

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