

The Impact of Dementia Care Mapping on Nursing Staff

**Thesis submitted for the degree of
Doctorate in Clinical Psychology
University of Leicester**

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contained within this thesis have not been submitted
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Abstract

Section one

The literature regarding dementia care mapping (DCM) and its use as a reliable, valid and efficient tool to assess care practice, is reviewed. Evidence for the growing efficacy of DCM is provided, however, the need for further development and research in a number of areas is highlighted, including nursing staff's experiences of DCM and the impact it has on them.

Section two

The current study aimed to explore the impact of dementia care mapping (DCM) on nursing staff. Semi-structured interviews were conducted with eight participants and grounded theory was used to analyse the transcripts. The analysis revealed one core category of conflict and four main categories of carer's role, learning processes, responses and learning consequences. The impact of DCM was such that it represented a learning process that interacted with the carer's role, evoked a response and produced learning consequences. Furthermore, DCM was such that it both induced and reduced conflict for the participants. The findings provide an insight for clinicians working in the field of dementia care who are involved in the training, development and support of nursing staff. Further research is required to define the role and needs of nursing staff who care for individuals with dementia. In addition continued investigation into effectively implementing tools, like DCM, for the purposes of staff development is also required.

Section three

The critical appraisal reflects on the process and experience of conducting research. Learning points are considered from the difficulties faced to inform future practice.

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Section 1

Literature Review

A literature review tracking the development and utility of dementia care mapping and its future as a reliable, valid and efficient tool to assess care practice

Article written for The Journal of Advanced Nursing (see Appendix 8 for guidelines)

Abstract

Dementia care mapping (DCM) is an observational tool designed to evaluate the quality of care and well-being of people who have dementia in formal care settings. The purpose of the literature review was to consider the development and utility of DCM as a reliable and valid tool to assess and develop care practice. The principal reference source for this review was the DCM bibliographic database at University of Bradford, which contains all publications known on DCM (www.bradford.ac.uk/acad/health/bdg/dcm/publications/index.php). In total, 26 papers were reviewed and these examined DCM and its use as a baseline measure, an outcome measure to evaluate interventions, its role in improving quality of care, and also from a practice development perspective. Evidence for the growing efficacy of DCM is provided, however, the need for further development and research in a number of areas are highlighted. The most important of these appears to be the role of DCM in practice development, specifically nursing staff's experiences, and the impact on staff of DCM.

1.0 Introduction

1.1 What is dementia care mapping?

Dementia Care Mapping (DCM) is an observational tool designed to evaluate the quality of care, and well-being of people who have dementia in formal care settings (Bradford Dementia Group, 1997). DCM is grounded in the theoretical perspective of a person-centred approach to dementia care. It requires a combination of empathy and observational skill in a unique attempt to take the standpoint of the person with dementia (Kitwood, 1997).

1.2 A person-centred model of care

Dementia is labelled as a psychological disorder however it is acknowledged that the psychological needs of people with dementia are often ignored (Clare *et al.* 2003). In response to this, there has been significant growth in dementia care. Psychologists have been instrumental in developing both theory and practice and, in expanding the research base considering care of people with dementia. Two examples of this development are the person-centred model of care, and the observational tool of dementia care mapping (DCM).

The main proponent of person-centred care and ‘personhood,’ and originator of DCM, was the late Tom Kitwood. Kitwood and Bredin (1992a, p.269) stated there is “no coherent theory of the process of care for those who have a dementing illness in later life.” In order to rectify this, and feeling dissatisfied with the medical model of care, Kitwood was responsible for developing a social-psychological theory of dementia. This theory is described in various publications (Kitwood, 1990; 1993; 1997; Kitwood & Bredin, 1992a). The basic premise involves the “dialectical interplay between neurological and social psychological factors, with special

emphasis on aspects of the latter, which deprive a neurologically impaired individual of their personhood” (Kitwood, 1990, p.177). While a psychological understanding of the profile of cognitive strengths and weaknesses is essential, it is not just the cognitive deficit that affects the experience of the individual with dementia. Other factors are likely to have impact such as personality, history, physical health status and the social psychology of the environment. These need to be considered when providing person-centred care (Kitwood, 1997).

The theory highlights the importance of a supportive and social-psychological environment for those with dementia, which may mitigate effects of neurological impairment (Kitwood, 1997; Sabat, 1994). However, Kitwood (1993) also proposed that social-psychological factors could detrimentally contribute to the experience of dementia. This is often referred to as malignant social psychology (MSP), a term given to forms of care practice that undermine the individual. Kitwood (1997) named 17 forms of MSP, such as treachery, the use of dishonest representation or deception to obtain compliance, and disempowerment, doing for a dementia sufferer what he or she can in-fact, do albeit clumsily or slowly. Malignant social psychology is often manifested in the form of personal detractions or putdowns (Beavis, 1998).

These developments have demonstrated an attempt to move away from the old culture of dementia care, where the individual was maintained in a safe environment with simply physical needs attended to. In contrast, the culture of person-centred care involves maintenance and enhancement of personhood through individualised care, emphasizing the perspective of the person with dementia, and stressing the importance of relationships (Brooker, 2004; Kitwood & Benson, 1995; Packer, 1999).

In such a culture, honouring personhood in dementia, and thus, maintaining well-being is indicative of good quality care. Conversely, sustaining MSP practices that undermine the person with dementia, causing them ill being, constitutes inadequate quality care. If one can look at the person and not the diagnosis, it is possible to enhance the individual's well-being by attending to their psychological and social needs (Bell & McGregor, 1995). This offers the person attachment, comfort, identity, occupation and inclusion (Kitwood, 1997).

1.3 The methodology of DCM

The methodology of DCM is well documented elsewhere (see Bradford Dementia Group, 1997; Innes *et al.* 2000; Kitwood, 1992; Kitwood & Bredin, 1994). In brief, it involves an observer (mapper) tracking a maximum of five people with dementia (participants) continuously over a representative time period (e.g. six hours during the waking day). It is recommended that no more than five people be observed at any one time because this may affect the mappers' ability to fully account for the subjective experience of the person with dementia. Mapping takes place in communal areas of care facilities. After each five-minute period (a time-frame), two types of codes are used to record what has happened to each individual. The Behaviour Category Code (BCC) describes one of the 24 different domains of participant behaviour that has occurred (see Appendix 1). BCC's are divided into those behaviours that are thought to have a high potential for well-being (Type 1) and those with a low potential (Type 2). The mapper also makes a decision for each time frame, based on these behavioural indicators, about the relative state of ill-being or well-being experienced by the person with dementia. This is recorded as a Well/Ill being value (WIB value). The WIB value is expressed on a six-point scale (see Appendix 1) ranging from extreme ill being (-5)

to extreme well-being (+5). WIB values can be averaged to arrive at a WIB score. The score provides an index of relative well-being for a particular time period for an individual or group. Personal detractions (events that undermine those with dementia) are recorded according to type and severity. Positive events (those that enhance people with dementia) are described, but not coded in a systematic manner. The coding frames and WIB values offer information on those individuals or care facilities that may require care interventions. Using both qualitative and quantitative data, DCM attempts to improve standards of person-centred care by means of a repeated cycle of developmental evaluations.

1.4 A brief epistemological background to DCM

The method and coding system for DCM were originally developed through many hours of ethological observations in nursing homes, hospital facilities, and day-care centres in the U.K. (Kitwood & Bredin, 1994). DCM was designed primarily as a tool to develop person-centred care practice over time, with data being fed back to care teams to improve care. The original development of this work is not available in the public domain and in consequence, Kitwood has been criticised (Adams, 1996). In addition, many of the basic psychometric tests expected for the development of such a complex tool to ensure its validity (e.g. producing normative data) have not been published.

Capstick (2003) acknowledged that the extent to which DCM has been theory driven from its inception is unclear. There are some theoretical orientations that Kitwood draws on to explain the experience of the individual with dementia and these have also played a part in the formation of his social-psychological theory of

dementia. In summarizing the theoretical nature of Kitwood's ideas, they involve threads from the humanistic psychology of Carl Rogers (1961) and the social psychology of Harré and Secord (1972) and Harré (1993).

1.5 The data generated from dementia care mapping

The data generated from a map are the following:

- The individual and group well-being and ill-being scores (WIB scores)
- The individual and group well-being and ill-being value profiles (WIB value profiles)
- The individual and group behaviour profiles
- The dementia care index (DCI)

These aspects of DCM terminology, along with those mentioned in Section 1.3, (i.e. behaviour category codes, time frames, well-being and ill-being values) are referred to throughout the review and discussion of the literature. A glossary of DCM terminology that includes a more comprehensive explanation of the DCM data can be found in Appendix 1.

1.6 Search strategy

The aim of the current literature review was to investigate the development and utility of dementia care mapping as a reliable, valid and efficient tool to assess care practice within the National Health Service (NHS). Articles were chosen where they assessed evidence for the efficacy of DCM, and where DCM had been used as a main measure in evaluation or research. Since DCM is a relatively new tool and, in order to gain a broader perspective of the literature, there were no exclusion criteria based on

quality of scientific design. However, dissertations, papers not published in the English language, and articles that were based purely on subjective experience were not included.

All DCM publications are entered into a bibliographic database that is maintained by the international DCM network led by the University of Bradford. A reference list derived from this database formed the basis of this review. The references on the database (www.bradford.ac.uk/acad/health/bdg/dcm/publications/index.php) are varied and include articles from both peer reviewed and care practice journals, book chapters, theses and non-English language texts. The author also entered the terms ‘dementia care mapping,’ ‘DCM,’ and ‘person-centred care’ into the following search engines:

- Allied & Complementary Medicine – 1985 to date (AMED)
- British Nursing Index – 1994 to date (BNID)
- CINAHL (R) (NAHL)
- EMBASE – 1974 to date (EMZZ)
- MEDLINE – 1966 to date (MEZZ)
- MEDLINE – 1996 to date (MEDL)
- PsychINFO, 1887 to date (PSYC)

2.0 Review of the Literature

2.1 Overview

Since its inception, DCM has evolved both in research and clinical practice. Originally used as a tool for evaluating standards of dementia care (Kitwood & Bredin, 1992b), it has also been used as an outcome measure, an audit tool, a method for evaluating care in multi-method and cross-sectional surveys, and for the purposes of practice development. Although DCM was not originally meant as a research tool,

several recent articles have examined its psychometric properties (e.g. inter-rater and test-retest reliability, concurrent validity).

Despite the apparent versatility of this tool, gaining recognition in both clinical and academic research, it is criticised from a number of perspectives. These include its reliability and validity, utility with those who have severe dementia and the subjective aspect of the method and theory behind it (Adams, 1996). Although supporters of DCM claim that problems arise when people use it for purposes for which it is not meant, it must not be forgotten that this is a “tool under progress” (Brooker, 2002, p. 33). This being the case it is clear that many aspects of DCM merit further investigation. The aim of the current review was to investigate what has been achieved so far in terms of the efficacy and utility of DCM when used in the varying contexts described above. The articles presented were split into five categories and these represent the various ways in which DCM has been utilized. Running through the articles are common threads regarding methodological robustness and the general efficacy of DCM in assessing and developing care practice.

2.2 DCM used as a baseline measure

Two studies have used DCM to assess care in cross sectional surveys. The main aim was to employ DCM to gain preliminary, baseline data that could be expanded on through further investigations. Wilkinson (1993) used the DCM method to assess and compare the nursing care of people with dementia across six NHS day care and continuing care facilities. The results demonstrated at least a good standard of care with the highest scores going to a day hospital and occupational therapy craft group.

In many ways this early study (Wilkinson, 1993), and the conclusions drawn from it, could be regarded as setting the scene for the future research agenda for DCM. Wilkinson (1993) presented a dichotomy in the scores between the day care and continuing care environments. He suggested this indicated that the DCM scoring system was biased in favour of less dependent, more capable, sociable patients and it was these individuals who attended the day hospital. This finding called into question the validity of DCM where the scoring rules indicate that behaviours that enhance well-being, such as enjoying a game of cards, will automatically take precedence over more passive behaviours such as sitting alone (Beavis, Simpson & Graham, 2002). However, in addition to this, Wilkinson (1993) also suggested that lower scores in the continuing care units could be indicative of poor staff morale due to the demanding and sustained workload. These hypotheses raise two issues: the first being that level and severity of cognitive impairment had the potential to confound the results of a mapping exercise. Individuals at the later stages of dementia, who were more dependent, were perhaps less capable of undertaking the sociable behaviours (e.g. playing a game of cards) associated with the well-being scoring in DCM. If this is the case, DCM data for those individuals, with greater dependency needs, may be problematic and paint too bleak a picture of the care provided (James *et al.* 2002). In addition, Wilkinson (1993) did not use any sampling procedure, matching the participants for variables such as mood, personality, physical status, and severity of dementia and this represents a weakness in the study. Furthermore, his comments about staff morale were purely suppositions based on the DCM scores for that care environment and therefore lack substance.

Wilkinson (1993) also made reference to the fact that the DCM method may appear too subjective. He defended this by making reference to the DCM training course where the course raters “rapidly converged in their scoring” (p. 1028). However, such a claim could have been further consolidated through having another mapper involved and calculating inter-rater reliability.

Wilkinson (1993) concluded by recognizing that the primary purpose of DCM is for quality assurance and staff training, however, this was not investigated explicitly and cannot be substantiated. In addition, he advocated that further evaluation was required before DCM could be used confidently to compare care across settings.

Williams and Rees (1997) used DCM as a method to gain a baseline evaluation of care standards in NHS day centres and continuing care wards. The aim was to build on these baseline measurements in further studies, thus enhancing the standard of care in the settings evaluated. Through the application of DCM, it was hoped that inadequacies in care practice would be highlighted and eventually changed by development of staff training programmes.

The research conducted by Williams and Rees (1997) encompassed six clearly defined stages,

1. The first involved the mapping exercise and the feedback to staff. It was reported that the majority of the staff received the feedback well and action was taken promptly and enthusiastically. However, a small number remained anxious throughout despite reassurance and this was

recognized as an important area for further attention. The end of stage one saw the forming of a steering group and a working party aimed at promoting DCM at ward level.

2. Baseline measures were entered into a database
3. A report was disseminated to those responsible for funding the project. The working party continued communication with staff, updating them on the developing process.
4. Stage four saw instruction packages being devised for both qualified and unqualified nursing staff to provide a more detailed background to the DCM method and ethos. Instruction sessions followed and staff attendance rated as good, not dropping below 60%. A brief anonymous questionnaire was given to staff to assess the course. The overall response to this training and to the DCM method appeared enthusiastic.
5. This stage encompassed each area having a key person who provided supervised evaluations after further training. In addition, these individuals were a source of reference and motivation for other staff.
6. The final stage plotted future direction eventually involving the re-mapping of all areas.

One could propose that the phased approach demonstrated above could be utilized in the future to gain both staff and organisational cooperation in terms of a DCM map.

General conclusions drawn from the study conducted by Williams and Rees (1997) suggested that care received is not always congruent with the care that is planned and delivered. The authors hypothesised that this was due to the low morale of nursing staff, compounded by a general lack of feedback and a dearth of techniques used for measuring improvements in care for those with dementia. It was postulated that DCM provided a way of demonstrating that nursing people with dementia is important and rewarding. However, the lack of follow-up studies, coupled with the somewhat mixed staff response to DCM that was not formally investigated, means these hypotheses cannot be confirmed.

Methodologically, this later study (Williams & Rees, 1997) was more robust than that of Wilkinson (1993) in that several mappers were involved and inter-rater reliability was calculated. The rate of agreement between the mappers and their observations calculated at 78%. Wilkinson (1993) illuminated the need to have a clear sampling procedure to account for the level of cognitive impairment possibly confounding the results of a map. The authors of the later study stated that a sampling procedure was used but do not specify what this involved. Furthermore, in using DCM to assess care across settings, the authors do not appear to have addressed the concerns raised by Wilkinson (1993) regarding the utility of DCM for this specific purpose.

2.3 DCM and assessment of care practice

Whilst the previous two studies used DCM with the aim of gaining baseline data, other research has employed the tool to assess and improve aspects of quality of care and quality of life for individuals with dementia (Ballard *et al.* 2001; Innes & Surr, 2001; Perrin, 1997a & 1997b). Although the aims of these studies differed from those mentioned previously, there appear to be common threads with regards to methodological frailties affecting the reliability and validity of DCM and contributing to assessment of DCM as an efficient tool to assess care practice.

Perrin (1997a & 1997b) used DCM to measure the occupational and therapeutic requirements of individuals with severe dementia. Participants were selected using an objective sampling criteria. Severe impairment in dementia was quantified using the Behaviour Rating Scale of the Clifton Assessment Procedures for the Elderly (CAPE) (Pattie & Gilliard, 1979). Any score over 18 on a 36-point scale indicated severe impairment. Inter-rater reliability was not calculated as the author did the mapping herself.

The results of Perrin's investigations demonstrated a severe dearth of occupational provision for this client group and, consequently individuals spent less time in genuine positive well-being and a considerably greater period in ill-being. The validity of DCM was also questionable due to the fact that the dementia care index scores were incongruent with the environments (i.e. cramped, crowded environments with evident personal detractions were scoring higher). Perrin (1997a) hypothesised that the nature of severe dementia exposed weaknesses in conventional forms of nursing care and that for these patients, who withdraw socially and psychologically, a

more intimate, sensory stimulating style of care could be appropriate (Beavis *et al.* 2002). Like the previous study, however, this hypothesis of staff inadequacies was not formally investigated.

Perrin (1997b) found that aspects of the method of DCM deal primarily in behavioural composites, such as eating a meal and having a conversation, rather than behavioural components like smiling, nodding, and gesturing. Perrin (1997b) labelled these as micro-behaviours that are retained long after composite skill has disappeared. She reported that DCM does not have the sensitivity to capture these behaviour components and therefore, the tool is less discriminating for severely damaged people. In an effort to measure these micro-behaviours and to use as a supplement to DCM with those individuals who have severe dementia, Perrin designed the Positive Response Schedule (PRI) (Perrin, 1997b). The PRI was designed to capture behavioural components (rather than behavioural composites) such as body and head movement, smiling, looking at the environment or the carer and any kind of vocalization. Like DCM, it consists of a number of behaviour category criteria, which are listed on a raw data sheet. The observer then marks these responses from the participants as they occur.

Both Ballard *et al.* (2001) and Innes and Surr (2001) have used DCM to explore the quality of care provision. Ballard *et al.* (2001) explored the quality of care in both private and public sector facilities for people with dementia. The results indicated that quality of care needed a radical improvement in both contexts and no setting showed even a 'fair' standard of care. This study demonstrated inter-rater reliability with a

Kappa co-efficient of 0.8. A clear sampling criteria was not used to assess level of dementia, therefore, the results of this study must be accepted with caution.

Innes and Surr (2001) used DCM to explore care provision for those with dementia in residential and nursing homes. DCM was used because it was felt to capture both the process and outcome of care experienced by the person with dementia. The results from the evaluation showed that well-being values fell around the +1 level. This score indicated that homes were meeting physical care needs, but not attending to the broader psychosocial requirements of their patients. The authors suggested a relationship between higher levels of well-being and low levels of personal detractions however, this was not confirmed with statistical evidence. It was also observed that activities requiring staff intervention generated higher levels of well-being. Although the study asserted the care settings acted on these results, providing more staff training in the person-centred approach to dementia care, including more about techniques of multi-sensory stimulation, the impact of this was not assessed.

The methodological concerns raised in previous studies are still apparent. In terms of inter-rater reliability, there were three mappers and the level of agreement between them was calculated at 70%. However, no clearly defined sampling procedure was used to select the participants. It is not made clear on what basis they were chosen and matched for mood, physical health status and type and severity of dementia.

A more recent study used DCM to investigate the relationship between patient characteristics and well-being and activity. Potkins *et al.* (2003) evaluated the impact of language impairment on socialization in care facilities. In this study the sample was

more rigorously defined and DCM was undertaken with a random sample of at least 50% of residents with dementia in each of the facilities assessed. It was found that language dysfunction was associated with poorer behaviour category code distribution, regardless of level of cognitive impairment. In addition, receptive language problems were correlated with social withdrawal.

The strengths of the study conducted by Potkins *et al.* (2003) included the use of several measures of language impairment, dependency and behavioural or psychological symptoms (BPSD), as well as DCM to ascertain the results. Furthermore, it addressed representative reliability of DCM across all people with dementia, and highlighted particular features that are more prevalent in high dependency groups such as language impairment. This outcome perhaps indicates the difficulty of such groups to engage and thus achieve higher scores.

2.4 The role of DCM in practice development

The current review revealed six studies investigating the ability of DCM to develop practice by means of repeated DCM evaluations. The explicit goal of the studies was to use the information and data generated by DCM to change and develop care practice. This was achieved through feeding back to staff to address inadequacies in care and maintain good practice.

Martin and Younger (2000) examined the effect of promoting anti-oppressive practices on empowerment and choice to those with dementia. The objective was a movement towards a more person-centred culture of care. In the first of three studies, DCM was used to assess the level of well-being on two separate occasions in January

and July. The results from the DCM evaluation showed that by the July observation period, small improvements had been made in terms of practice development. The participants became more socially active and communicative with staff and their well-being increased. The results were weakened however, by the small sample size, unspecified sampling procedures (e.g. it is not made clear how and why the participants were selected), a lack of inter-rater reliability and the fact no statistical analysis was calculated. Thus other uncontrolled factors could have contributed to this change.

As with Wilkinson (1993) and Williams and Rees (1997), Younger and Martin (2000) used the DCM tool to provide an initial baseline measure score to be expanded on as part of a continuing quality assurance audit for developing person-centred care. To ensure they did not feel undermined by a poor result, and were able to effectively contribute to improvements, the involvement of the care team at all stages was emphasized.

The results achieved by Martin and Younger contrasted with the previous studies in that they achieved high DCM scores, despite greater dependency levels. This was attributed to good interpersonal skills used by staff, including the anti-oppressive practices that were indicative of the new culture of care outlined in Martin and Younger (2000). Although the criteria for time taken to evaluate individuals, and sample size was met, the results were weakened due to the lack of inter-rater reliability and statistical analysis. Furthermore, there was no clearly defined sampling procedure on which participants were chosen. The ward staff were responsible for

selecting a sample “representative of the client group” (Younger & Martin, 2000, p.1207). It was reported that the CAPE was used to measure dependency levels.

The third stage in the investigations of Martin and Younger (2001) represented a follow-up to the previously mentioned study (Martin & Younger, 2000). The task was to assess the level of person-centred care and compare it to the previous year’s scores where appropriate (Martin and Younger, 2001). The results indicated that within the researched NHS Trust, there was an overall increase in well-being values. Based on the increase, the authors speculated that more person-centred approach to care was being pursued.

This investigation (Martin & Younger, 2001) appeared to be more rigorous than the previous studies conducted by Martin and Younger. Inter-rater reliability measurements were undertaken with all mappers achieving a concordance of 80% and above. However, despite this, the sampling procedure was not objective in terms of matching participants for level of cognitive deficit and dependency, and this would seem to weaken the results. The authors claimed that the outcome of the three studies indicated that a paradigm shift was beginning to occur in terms of the organisation moving from the medical model, towards more psychosocial forms of care. In addition, it was speculated that the results from the DCM process may have helped to bring about a refocusing of practice from “one of mainly physical care to one which values the broader concept of person-centred care” (Martin & Younger, 2000, p.66). Methodological issues concerning undefined sampling procedures weaken these findings. In addition, the lack of statistical analysis meant that other uncontrolled factors could have contributed to change. A further omission was the failure to

account for the actual views and feelings of staff with regards to DCM, and the impact and contribution DCM made to their practice development.

In a longitudinal study assessing the role of DCM in practice development, Brooker *et al.* (1998) investigated the efficacy of DCM as a quality assurance audit tool to be used in a cycle of developmental evaluations. The settings were United Kingdom long-term care, including assessment wards, respite and day care.

The results of Brooker *et al.* (1998) included statistical analysis, with group well-being and ill-being scores significantly improving over time in long stay care. Changes in the behaviour category codes were also indicative of a more positive experience for those involved. There was also a significant decrease in personal detractions over time. Furthermore, the correlation between high dependency and low well-being lessened through cycles.

The study of Brooker *et al.* (1998) acknowledged that the obtrusive nature of observing care practice can be daunting, and staff may feel under scrutiny. To address this issue, the acceptability of DCM to nursing and care staff was explored using the Staff Acceptability Questionnaire (SAQ) (cited in Brooker *et al.* 1998) and the Dementia Care Styles Questionnaire (DCSQ) (cited in Brooker *et al.* 1998). The results demonstrated that the numbers of staff feeling 'a little anxious' or 'very anxious' decreased over successive evaluations. An increasing number classed themselves as 'a little bothered by DCM evaluations' over successive years and a small percentage of staff continued to feel anxious. Despite this, 100% of staff thought the results would be useful in improving care by the third cycle. Attitude

change was measured using the DCSQ however the results were inconclusive. A small number of staff responded with more person-centred answers, but this did not necessarily correspond with higher group well-being scores. The authors called for further research in the area. It was a strength of this study that these issues were addressed and investigated. However, the SAQ and DCSQ were designed by the author and do not seem to be indicative of validated, robust standardised measures, thus the validity of the results produced from these questionnaires could be questioned.

The study of Brooker *et al.* (1998) demonstrated inter-rater reliability with an agreement level of 80%, however the authors acknowledged that assessing the validity of DCM is difficult because there is no other tool that directly measures the same aspect of care. In this case, face validity is demonstrated by the results on the SAQ whereby 88-100% of staff thought that DCM helped to improve standards of care. Similarly the findings from a number of other audits (i.e. pressure area care, care plan audits) that were occurring at the time demonstrated some congruence with the DCM results.

It is not clear from the Brooker *et al.* (1998) study how the participants were selected. The Clifton Assessment Procedures for the Elderly (CAPE) was used to assess dependency levels. The results indicated that there was no significant difference in dependency levels between cycles. But during the first two years, there was a significant negative correlation between individual well-being scores and levels of dependency. It could be said that a relationship between the two variables exists;

the higher the well-being, the lower the dependency. Thus there appears to be some agreement with the views of Wilkinson (1993) and Perrin (1997a & 1997b).

Other studies that have considered DCM and practice development include Barnett (1995) and Lintern, Woods and Phair (2000a). The lack of clear and precise information about methodology and sample characteristics again weakens their findings. Both studies claimed that group well-being values increased over time, but there was no calculated statistical analysis of this change. Furthermore, the studies were published in practice journals, and were mainly anecdotal and descriptive. Despite this, Barnett (1995) concluded that DCM was successfully utilized not only as an audit tool, but also as an instrument to raise consciousness and accelerate attitude change. However, no objective evidence of this was presented. The work also demonstrated the importance of having strong organisational backing for a DCM evaluation, including a framework that encompasses reflective practice, shared value base, supervision, and sensitive feedback to staff after evaluations have taken place.

Similarly, Lintern *et al.* (2000a) used a DCM evaluation to assess the impact of staff training in person-centred care on the well-being of residents with dementia. The mapping was done in the aftermath of the training however, the well-being and ill-being scores of the individuals with dementia did not demonstrate a change indicative of the practice development of staff.

In a follow-up investigation, Lintern *et al.* (2000b) continued to undertake DCM evaluations over a period of twelve months, and reported the results back to staff. The findings showed that while some changes in staff attitude and behaviour were

evident after the initial training phase, it was only after a further two six-month periods of developmental change, based on the DCM feedback to staff that improvements in resident well-being could be demonstrated. Staff development and potential change in care practice were measured using the Dementia Care Practitioner Assessment (DCPA) (Lintern & Woods, 1996; cited in Lintern *et al.* 2000a). The DCPA is described as constituting a battery of assessments (questionnaires, videos), which together provide an indication of staff attitudes, knowledge and skills.

The results from the DCPA battery of assessments, showed increased awareness of person-centred approaches to care. The feedback from the DCM evaluations demonstrated that training alone was insufficient to lead to improved outcomes for residents in the form of staff development. Instead, it seems that the feedback, and potential reinforcement received from a DCM exercise was a crucial component in actually aiding staff development. The conclusions regarding the potentially reinforcing role of DCM in the work of staff are interesting. However, there was no statistical analysis performed on the DCM evaluations and DCPA outcomes, which weakens the claims of Lintern *et al.* (2000b).

2.5 DCM as an outcome measure

Several studies have used DCM to evaluate different interventions. Bredin *et al.* (1995) first used DCM to evaluate the impact of a ward merge. In addition, it has been used to evaluate a number of non-pharmacological therapeutic interventions such as group reminiscence (Brooker & Duce, 2000), aromatherapy (Ballard *et al.* 2002), sensory stimulation groups (Maguire & Gosling, 2003), intergenerational programmes (Jarrott & Bruno, 2003) and horticultural therapy (Gigliotti *et al.* 2004). DCM has

also been used on a larger scale to evaluate changes in therapeutic regimen for person-centred care training (Lintern *et al.* 2000a), and to assess if a liaison psychiatry service can reduce neuroleptic use and reduce health service utilization for dementia patients (Ballard *et al.* 2002). Other research used DCM within a double-blind, placebo-controlled, neuroleptic discontinuation study (Ballard *et al.* 2004). With the exception of Jarrott and Bruno (2003), who compared two groups, all evaluations were within-subject designs.

It is beyond the scope of the current review to examine all the articles investigating DCM as an outcome measure, but taken together, they provide some indication of the evolving nature of DCM. The majority are methodologically robust with the use of control groups, appropriate sampling characteristics and strong inter-rater reliability coefficients. Furthermore, in many of these investigations, statistical analyses indicated demonstrable changes in DCM scores. DCM appears to show discrimination in a variety of interventions (Brooker in press). The studies also suggest that DCM is perhaps best suited to smaller-scale, within-subjects designs or group comparison interventions.

2.6 The psychometric properties of DCM

DCM was not originally designed as a research tool, but the studies reviewed thus far indicate that it has evolved in this domain. The literature revealed two articles investigating the psychometric properties of DCM. Fossey *et al.* (2002) examined the internal consistency, test re-test reliability and concurrent validity of DCM. The results demonstrated a good internal consistency and a significant correlation between

well-being and ill-being scores and an informant rated quality of life measure ($r = 0.73, p < 0.0001$). Furthermore a good level of test-retest agreement ($r = 0.58, p < 0.0001$) was achieved for considerable well-being (indicated by WIB values of +3 and +5) and ill-being score ($r = 0.55, p < 0.0001$). These developments, coupled with previous studies' high inter-rater reliability scores, suggests the potential utility of DCM as a quality of life measure for those with dementia in care environments.

A more recent investigation into the psychometric properties of DCM conducted by Thornton *et al.* (2004) has questioned the validity of the findings of Fossey *et al.* (2002), as well as other studies claiming good inter-rater reliability. Thornton *et al.* (2004) reflected that experienced DCM mappers with close links to the Bradford Dementia Group (who deliver the training) undertook these studies, thus representing a potentially confounding factor. This could explain the high levels of inter-rater agreement, rather than the actual reliability of the tool itself. Thornton *et al.* (2004) sought to address this anomaly by assessing inter-rater reliability amongst routine care staff trained as DCM mappers.

This research of Thornton *et al.* (2004) also aimed to investigate whether the duration of the time frame after which an observational recording is made, can provide a meaningful representation of actual events. It also sought to explore construct validity, in particular if the well-being/ill-being coding frame could demonstrate discrimination of well-being from the dependency level of the individual, thus addressing some of the concerns that have been raised in previously discussed studies.

Using DCM, a continuous time sampling method and the CAPE (Pattie & Gilliard, 1979), the results of Thorton *et al.* (2004) demonstrated low levels of inter-rater reliability on both the behaviour category codes and well/ill being coding frames. This was attributed to a number of characteristics of the DCM method, including the complex nature of the 24 behaviour category codes, and the mapping of multiple individuals within this complex framework (see Section 1.3 & Appendix 1). The researchers also recognised that low inter-rater reliability may be attributable to the participants of their study. Replication of the findings would elaborate this.

Regarding the accuracy of the five-minute time frame, the DCM method appeared to significantly underestimate the amount of time the participants were socially passive, withdrawn or disengaged. This was attributed to the rules of the DCM coding system. Behaviour category codes indicating that the individual is undertaking a social activity are prioritised over non-active codes, where the individual is observed to be more passive. In addition, the five-minute interval is interpreted as representing one behavioural event and does not permit the frequency of discrete behaviours to be recorded accurately. Finally, a strong relationship was demonstrated between the participants' well-being/ill-being score and their level of dependency. The well-being/ill-being coding frame appeared unable to measure well-being as a separate construct from participants' levels of dependency. This raises concerns about the validity of the well-being coding frame in that levels of dependency in dementia have the capacity to skew DCM results, thus making them unreliable.

Edelman, Fulton and Kuhn (2004) examined the validity of DCM by comparing it with four dementia specific quality of life measures, including staff, proxy measures,

direct interviews, and quantitative, inventory style questionnaires. The results demonstrated a moderately significant correlation between well/ill-being scores and the staff proxy measures of quality of life. However, there was no correlation between any of these measures when compared to direct quality of life interviews with a less cognitively impaired sub-group. Similarly, in his multi-method study, including DCM, Parker (1999) noted that during interviews, people with dementia rated their quality of life as better than their DCM scores would suggest.

3.0 Discussion

The current literature review concentrated on articles that have shown the evolving nature of DCM from a number of perspectives: as a baseline and outcome measure, a research tool, method of practice development and as a measure of quality of care and quality of life.

Some of the literature presented has investigated the reliability and validity of DCM. In terms of validity, the question is, does DCM actually measure quality of care and/or quality of life? The findings of Brooker *et al.* (1998), Fossey *et al.* (2002) and Edelman *et al.* (2004) have demonstrated that DCM measures something similar to proxy measures and other observational measures. Parker (1999) found that people with dementia rated their quality of life as higher than DCM would suggest. It is recognised that DCM differs from other quality of life and quality of care measures in that it attempts to measure elements of both (Brooker, in press).

Many studies reviewed have demonstrated high inter-rater reliability, however, Thornton *et al.* (2004) found results contrary to this when many routine members of

care staff engaged in mapping at different points in time. Surr and Bonde-Nielsen (2003) outlined the various ways in which reliability can be achieved in routine mapping. They postulated that although inter-rater reliability has been shown within studies, it cannot be assumed when comparing one study to another and this is the major challenge for those providing DCM training. In addition, it is suggested that inter-rater reliability could be achieved if all mappers had regular checks with a “Gold Standard Mapper,” a status which is accredited by regular web-based or video role play material that mappers have to code correctly to maintain their position as “Gold Standard Mapper.” To date however, such a position has not been formalised or accredited. According to Brooker (in press), efforts are being made to decrease the ambiguity of codes and to eliminate any unnecessary complexity from the rules. In addition, she acknowledged that there is no published data on inter-rater reliability regarding personal detractions and positive events. It is hoped these will be incorporated into future training manuals (Brooker, in press).

Fossey *et al.* (2002) demonstrated a good level of test-retest agreement with regards to considerable well-being and ill-being scores ($r = 0.55$, $p < 0.0001$). The work of Fossey *et al.* (2002) has not been replicated to date, which would seem to be an oversight in the literature given that test-retest reliability is vital for any tool that measures individual change.

The results of the early studies of Wilkinson (1993) and Perrin (1997a & 1997b) highlighted the issue of whether or not DCM shows reliability across all people with dementia. Other studies reviewed have demonstrated that high levels of dependence are correlated with low well-being scores (i.e. Brooker *et al.*, 1998; Thornton *et al.*,

2004). However, in contrast to this, Martin and Younger (2000) found higher scores in the most dependent participants and attributed this finding to the improved interpersonal skills of staff. Similarly, Brooker *et al.* (1998) showed that the correlation between dependency and well/ill-being scores disappeared after three successive cycles due to increasing staff knowledge of how best to support more dependent patients. Taking these findings together, it seems that correlations between low well/ill-being scores and high dependency may be related to a poorer quality of psychosocial care for people with dementia who have high dependency needs. It should also be acknowledged that it is unclear if there are particular features of higher dependency groups, for example language dysfunction, that make them more difficult to engage with (Potkins *et al.* 2003).

There is sufficient evidence that dependency levels skew DCM results. As a consequence of this, a measure of dependency should be routinely taken alongside DCM evaluations (Brooker, in press). Studies that have failed to do this (i.e. Ballard *et al.* 2001) may actually be painting too bleak a picture of care practice in the UK (James *et al.* 2002).

It has been acknowledged that DCM was not originally designed as a research tool, however, as investigations into its reliability and validity increase, the current review indicates that it is becoming used in this way. Findings require replication and the issue of impact of dependency and diagnosis on scores needs to be determined. There has been a promising start to investigations into the psychometric properties of DCM and more studies are expected (Brooker, in press). In considering the use of DCM as an intervention evaluation, the current review has acknowledged several studies

showing DCM is perhaps best suited to small scale, within-subjects, or group comparison intervention evaluations. However, with larger scale studies, DCM has yet to prove its worth due to the time consuming nature of undertaking mapping. Furthermore, when many different mappers engage in mapping at different points in time (as would be the case with larger scale studies), discrepancies in coding can have a significant impact on the results (Thornton *et al.* 2004). DCM also provides an opportunity to reflect on what could be the viewpoint of service users who are unable to participate fully in interviews.

Although DCM has also been used in cross sectional surveys, Brooker (in press) postulated that other less time consuming tools maybe more suited to this task. It seems, like all research tools, careful consideration should be given in deciding whether DCM is fit for purpose given the specific topic under investigation. The results of Thornton *et al.* (2004) demonstrated that behaviour category codes do not measure real time estimates of different types of behaviour. They suggested modifications in the DCM rules for selecting behaviour category codes and well/ill-being values (Brooker, in press).

DCM was originally developed as a tool to assess, and hopefully, improve the care practice of those who look after people with dementia. Brooker (in press) reported that when DCM is used within an organisational framework that supports person-centred care, it can improve levels of well-being, increase diversity of occupation and decrease personal detractions. In this sense, DCM does have a role in practice development and research within the broad aim of improving quality of life for those with dementia. These conclusions are based on the studies of Barnett (1995), Brooker

et al. (1998), Lintern *et al.* (2000b), Martin and Younger (2000) and Martin and Younger (2001). Collectively, these works claimed that well/ill-being scores increased, but very little statistical evidence was presented with regards to this. In addition, Martin and Younger (2000) noted that staff improved empowering care practice, however other factors could have caused this change. The study conducted by Brooker *et al.* (1998) was the only one to produce statistical evidence to substantiate the results.

It is also evident from the current review that studies make assumptions about staff attitudes, morale, ability and development following a mapping exercise, based solely on high or low well/ill-being values and/or dementia care index scores. For example, it is hypothesised that the relationship between high dependency and low well-being scores lessened through the DCM cycles due to improved ability of staff to care for more dependent patients (Brooker *et al.* 1998). In addition, Williams and Rees (1997) commented that low DCM scores reflected the low morale of staff potentially compounded by a lack of feedback. Perrin (1997b) also felt that the nature of severe dementia exposed weaknesses in conventional forms of nursing care. However, these are opinions as yet unsubstantiated, and the actual staff experience of DCM and its impact on the care they provide has largely been ignored in the literature. This would seem an oversight, especially when assessing the role of DCM in practice development.

Several studies have acknowledged the anxiety provoking nature of DCM for care staff (Innes & Surr, 2001; Williams & Rees, 1997). Although Brooker *et al.* (1998) investigated staff acceptability of DCM; the measures used were not validated. The

potentially positive aspects of DCM for staff (i.e. providing reinforcement and increased insight into their client group) have been highlighted in the work of Barnett (1995) and Lintern *et al.* (2000a & 2000b), however these results were mainly descriptive and not written up as formal research. The authors of these studies acknowledged that more research is needed in this area.

To conclude, the literature has shown that in the field of DCM there are many disparate strands but no unified research literature or indeed aims. DCM seems to be a tool in its infancy, generating embryonic ideas, some of which have been carried forward and some that have not. The literature reviewed has demonstrated that DCM has several strengths: it is standardised; versatile; responsive to change and has a growing research base. In terms of assessing care practice, DCM also provides a shared language and focus across professional disciplines (e.g. researchers and practitioners), care staff and management teams. It has been implemented successfully to evaluate interventions, assess the quality of care and as a tool to aid practice development. Furthermore, is regarded as a valid measure by frontline staff to help them improve the care they provide. It should also be acknowledged that DCM is a serious attempt to take the view of the person with dementia and has improving the well-being and quality of life for these individuals at its core.

The current review has also demonstrated weaknesses associated with DCM in terms of the methodological frailties that affect DCM's general reliability and validity (e.g. gaining inter-rater reliability and the validity of the coding system for people in the later stages of dementia who are more dependent). In addition, DCM has been shown to be a powerful tool that can positively reinforce care staff, but can also

induce anxiety and conflict if it is not implemented properly. With these strengths and weaknesses in mind, the current review has demonstrated that the agenda for future research into DCM is significant and includes:

- A controlled longitudinal study to evaluate fully the impact of DCM in improving quality of life through practice development.
- Further investigation into aspects of reliability and validity not addressed or fully developed thus far.
- Conducting controlled studies, which compensate for confounding psychiatric features upon well-being and DCM outcomes.
- The development of more efficient ways of using DCM, especially as a research tool.
- Studies to investigate the impact of DCM upon nurses and the quality of care they provide to dementia sufferers.

However, staff awareness, self-knowledge, and reflection seem to be the pivot on which DCM is dependent. Future growth of DCM as an observational tool, with practical efficacy would appear to be reliant on staff acceptance with regards to its use. The author of the current study is of the opinion that the staff and organisational components in the use of DCM are crucial and should be the starting point for future development.

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Section 2

Research Report (OPTION 1)

The impact of dementia care mapping on nursing staff

Abstract

The current study aimed to explore the impact of dementia care mapping (DCM) on nursing staff who care for individuals with dementia. Semi-structured interviews were undertaken with eight members of nursing staff who worked within National Health Service (NHS) continuing care wards and day services. Using the qualitative methodology of grounded theory to analyse the transcripts, several categories that form a process model were developed to encapsulate the impact of DCM. The core category of conflict represented the primary conceptual focus of the analysis and permeated the other four main categories of the carer's role, learning processes, responses and learning consequences. The impact of DCM was such that it represented a learning process that interacted with the carer's role, evoked a response and produced learning consequences that potentially contributed to staff development, but were also effected by individual and external, organisational factors. Furthermore, DCM was such that it both induced and reduced conflict for the participants. The findings provide an insight for clinicians working in the field of dementia care who are involved in the training, development and support of nursing staff. Further research is required to define the role and needs of nursing staff who care for individuals with dementia. In addition continued investigation into effectively implementing tools, like DCM, for the purposes of staff development is also required.

1.0 Introduction to the current study

1.1 Dementia and its consequences

Dementia has been described as an illness, which destroys life without taking it (Aronson, 1994). This is perhaps due to the constellation of symptoms that characterise dementia including: disorientation, memory loss, problem solving and language difficulties, and poor concentration, which can leave the individual confused, bewildered and insecure (Department of Health, 2001; Miller & Morris, 1993). Prevalence and incidence of dementia increase with age and it is estimated that between 600,000 and 750,000 people in the U.K. have dementia (Alzheimer's Society, 2005; Department of Health, 2001).

1.2 A new culture of person-centred care

As dementia progresses, individuals usually require support in the form of either long-term or respite care. This care is provided both in the private sector and in National Health Service (NHS) continuing care and day service facilities (Alzheimer's Disease Society, 2005). In contrast to earlier palliative models of care, a growing body of research exploring a new culture has witnessed a shift in the perceptions, understanding, attitudes and behaviour of staff working with individuals who have dementia. This culture emphasizes the psychological and social needs of these individuals as just as important as attending to their physical needs (Brooker, 2004; Kitwood, 1997; Moyes & Christie, 1998).

Changes in orientation of care are encapsulated in Kitwood's social-psychological theory of dementia care (Kitwood & Bredin, 1992a). This encompasses preservation of personhood through individualised care, emphasizing the perspective of the person

with dementia, stressing the importance of relationships and the effects of the care environment (Kitwood, 1997).

Person-centred care is also embedded within the current political agenda evidenced by the NHS Plan (Department of Health, 1997) and The National Service Framework for Older People (Department of Health, 2001). Both emphasize the potential of person centred care to enhance quality of life and embrace interventions for dementia which focus on the unique qualities of the individuals, as well as their personal and social needs (Department of Health, 2001). The Audit Commission (2000) endorsed the observational tool of dementia care mapping (DCM) as a method to measure the delivery of person-centred care.

1.3 Dementia care mapping (DCM)

DCM is grounded in the theoretical perspective of person-centred approaches to care. It is a technique for creating a condensed record of the process of care through close observation and recording of the experiences of individuals with dementia in care environments (Bradford Dementia Group, 1997; Moyes & Christie, 1998). Use of this tool enables rating of the quality of interactions, behaviours and care from a service user's perspective over a condensed time period.

A unique facet of DCM is that, as an observational method, it attempts to place the individual with dementia at the fore when focusing on their care and how to improve it. Brooker (1995) reviewed other observational methods and concluded that, although techniques employed have varied across studies, they attempt only to quantify the type and level of residents' activity. DCM is more comprehensive, endeavouring to

measure both the quantity and quality of activity to highlight changes that are required to improve care practice.

1.4 The development of DCM to date

The principal conclusion from the literature is that DCM is evolving both in research and clinical practice spheres (Brooker, 2002). However, despite the somewhat flexible nature of the tool, it is criticised from a number of perspectives including: its reliability and validity; its utility for those who have severe dementia; the subjective nature of the theory behind it; and the lack of basic psychometric tests expected in the development of such a complex tool (Adams, 1996).

This being the case, it is clear that many aspects of DCM merit investigation. To date, much of this exploration has scrutinised the credibility of DCM as a reliable and valid research and practice tool. However, as a means to achieve practice development (one of the original aims of DCM) via professional growth of staff and enhancing the care that is provided, staff engagement with DCM has been largely absent from published research.

1.5 DCM and practice development

One goal of studies that have employed DCM in practice development is to empower staff to change and develop care practice by utilising the qualitative and quantitative data generated by repeated DCM evaluations (Fox, 1995). Six studies have addressed this aspect of DCM.

In a series of three studies (Martin & Younger, 2000; Martin & Younger, 2001; Younger & Martin, 2000), Geoffrey Martin and Dennis Younger used DCM to assess the level of well-being amongst patients in a bid to move towards a more person-centred culture of care. Taken together, the results of these three studies indicated that well-being values of participants (people with dementia) increased between DCM evaluations. In addition, patients became more socially active and communicative with staff (Martin & Younger, 2000) and high DCM scores were achieved despite greater dependency levels in terms of dementia (Younger & Martin, 2000). By the final study, Martin & Younger (2001) felt the results indicated that within that particular NHS trust, greater levels of person-centred care were being pursued and a change in care culture was underway.

Similarly, Brooker *et al.* (1998) used DCM as a quality assurance audit tool. Three audit cycles over a three-year period, revealed results congruent to those of Martin and Younger. Well/ill-being values significantly increased over time, personal detractions decreased and the relationship between high dependency and low well-being scores lessened through cycles. These results were attributed to the increased competence of staff to care for more dependent patients.

Using the Staff Acceptability Questionnaire (SAQ) (cited in Brooker *et al.* 1998) and the Dementia Care Styles Questionnaire (DCSQ) (cited in Brooker *et al.* 1998), the study of Brooker *et al.* (1998) also examined the acceptability of DCM to nursing staff. These measures revealed that staff anxiety about DCM decreased over time and, by the third cycle, 100% of staff thought the results would be useful in improving care. Attitude change was measured using the DCSQ, however the results were

inconclusive. A small number of staff responded with more person-centred answers, but this did not necessarily correspond with higher group well-being scores.

The aforementioned studies all have significant weaknesses, most particularly a lack of clear sampling procedures. The omission of statistical analysis in the studies of Martin and Younger (Martin & Younger, 2000; Martin & Younger, 2001 and Younger & Martin, 2000) cannot exclude results arising due to chance. Furthermore, the questionnaires to assess staff development, attitude change and the acceptability of DCM to staff in the study of Brooker *et al.* (1998) were not validated measures. Investigations into attitude change led to inconclusive results, and the authors called for further research in this area.

Three other studies reported findings of practice development exercises using DCM. These were not written up as formal research and did not include statistical analysis. Furthermore, the descriptive nature of these accounts weakened the findings. Based on increased well-being values, Barnett (1995) claimed that DCM could be used as both an audit tool and as a method to hasten attitude change. Similarly, Lintern *et al.* (2000a & 2000b) used DCM to assess the impact of staff training in person-centred care. The results from the mapping done in the aftermath of training did not indicate a change of practice development for care staff. However, further DCM evaluations, with the results being fed back to staff, showed an increased awareness of person-centred approaches to care as measured by increased well-being values and the Dementia Care Practitioner Assessment (Lintern & Woods, 1996; cited in Lintern *et al.* 2000a).

Collectively, this overview of research suggests that DCM has a role in practice development, both developing staff competence and changing the culture of care. However, the cadre of research reviewed has been partial - making assumptions about staff attitudes, morale and abilities, based either on the data generated from a DCM evaluation, or quantitative measures of dubious validity. Additionally, it is claimed that DCM makes sense to front-line staff and can improve job satisfaction (Brooker, 2002). While the data generated from a DCM evaluation is important and informative, the foundation of such claims is questionable, particularly with contradictory findings rooted in flawed methodologies. An absence of detailed, objective research into the staff experience of DCM and its impact on the care they provide would seem an oversight, especially when assessing the role of DCM in practice development. Assessment of the process may clarify and substantiate the claims, and explore more rigorously some of the anecdotal reports that are considered below.

1.6 Anecdotal accounts of staff experiences of DCM

Staff experience of DCM has also been examined by subjective, autobiographical accounts. Collectively, these suggest that DCM can have diverse effects such as anxiety provocation, but also reinforcement of practice, which can in turn affect the application and continuation of a map (Bolton *et al*, 2000). Buckland (1995) noted that the DCM process can motivate, educate and improve quality of life. However, this is often tempered by its capacity to alienate, de-motivate and create anxiety amongst staff. Neel (2002) reflected that DCM caused role conflict and alienation when an individual is continuing to practice “under the competing pressure of two value systems” (Neel, 2002, p.27). These observations were mirrored in an interview conducted with three nursing assistants who experienced a map and then became

mappers themselves. They reported that the process encouraged reflection and raised their awareness, however, at times it felt like a test and this invoked feelings of anxiety (Packer, 1996).

Without staff acceptance and cooperation there would be very limited scope to assess the reliability and validity of DCM (Bolton *et al.* 2000). Part of DCM's utility reflects its capacity for staff development. Care staff must undertake the mapping process, receive feedback and learn from this feedback. However, apart from the assessment of well/ill being values that may arise, there appears to be a dearth of objective, detailed, formal research addressing the specific impact of DCM on the nursing staff observed during a map. Such a focus could evaluate DCM, its impact on nursing staff, the quality of care they provide and any barriers that may hinder its future growth. Bolton *et al.* (2000, p.26) suggested that staff reactions in relation to DCM mean it is necessary to "step back to move forward with DCM." Taking this step seems important not only to consolidate current information, but for the overall survival and development of DCM. In the words of Capstick,

"direct care workers are often at the bottom of the organizational hierarchy, so they are relatively powerless and poorly paid. If they are not treated with unconditional positive regard, then it is unrealistic to expect them to offer this to others." (Capstick, 2003, p.18)

1.7 Aims of the current study

The current research aimed to explore the impact of DCM on nursing staff who care for individuals with dementia. The word 'impact' was defined as an effect or influence. Circumscribed literature has highlighted practical ways in which DCM

impacted, effected or influenced staff, such as training. Emotional and psychological effects such as anxiety, role conflict and attitude change were also emphasized. Such issues formed the basis of the following subsidiary objectives to be investigated in the proposed study:

- Nursing staff's stance in terms of philosophy of care.
- Feelings about being observed and receiving feedback.
- Changes in attitude with regards to the people they care for.
- Effects the map may have had on personal and professional development.
- Long lasting effects in terms of a change of culture of care.

2.0 Methodology

This section describes the study design, together with the rationale for using the grounded theory method to analyse the transcript data. Information on the research strategy is also provided. Word length constraints meant that aspects of methodology were addressed further in Section 3, the Critical Appraisal. These include reasons for selecting the particular method of grounded theory to analyse the data, issues concerning rigor and validity, personal responses to the analysis, the question of saturation and reflexivity.

2.1 Design

It was reported in the previous section that hypotheses and assumptions were made in the research reviewed (e.g. Brooker *et al.* 1998; Perrin, 1997a & 1997b; Wilkinson, 1993) with regards to the morale, abilities and development of nursing staff. Such assumptions were not based on investigations into staff experience of DCM, but on the increased well-being values (WIB values) of the patients they cared for. Due to the absence of research and a lack of substantiative hypotheses with regards to the impact of DCM on staff, a qualitative methodology was employed in order to generate rich, descriptive and in-depth accounts, based on the actual perspective, perceptions and experience of those nurses involved in a DCM mapping exercise (Elliot, Fischer & Rennie, 1999; Henwood, 1996; Parker, 1994; Smith, 2003).

2.2 Grounded theory as a qualitative method

Grounded theory was selected as the method of analysis for the interview transcripts. This generic method is a respected procedure for studying textual information, designed to produce abstract, conceptual and multi-faceted category descriptions that render the development of a model or theory, and expand the

understanding of the data under study (Charmaz, 2003). The main principles include owning one's perspective in the process of reflexivity and the importance of moving from the descriptive to the analytic, whilst simultaneously remaining true to the data to develop plausible and useful theories grounded in textual documentation (Charmaz, 2003; Henwood & Pidgeon, 2003; Holloway & Todres, 2003; Strauss & Corbin, 1998). The purpose of building a theory is to present information that is accessible to other individuals and can be transferred to, and employed in, other settings. In addition, theories uncovered can be used as a foundation to build on in future research. Theory building is achieved in part through the analytic commitments of constant comparison and theoretical sampling (Pidgeon, 1996). An elaboration of these processes and how they were applied to this research is described later in the section.

Although the extent to which theory building occurs in grounded theory is often questionable (Charmaz, 2003; Strauss & Corbin, 1998), the emphasis on theory building and looking for processes within the data, distinguishes grounded theory from other qualitative methods, such as interpretative phenomenological analysis (IPA), which is primarily concerned with themes generated in the context of individual experience (Smith & Osborn, 2003). In the current study, the researcher used grounded theory because she had a theoretical supposition that nursing staff's experiences of DCM may represent a process indicative of both implicit and explicit layers of meaning (Charmaz, 2003). Furthermore, the tool of constant comparison across and within texts, and the division of the text into units of meaning, allowed these processes to become more elucidated. Finally, in keeping with the principles of grounded theory, it is hoped that the results of the research will be transferable to

other situations and settings addressing changing practices, staff development and new innovations. This would seem especially pertinent in the modern NHS where change is both integral and inevitable (Robertson, 1999).

2.3 Participants

Eight participants, whose identities were all anonymized with pseudonyms, were recruited from three different settings to take part in this study. Table 1 below shows the demographic information collected. Four female nursing assistants and one male nurse were recruited from Unit 1, an NHS long term and respite care dementia ward.

One individual was not recruited for the study, but volunteered having heard about the research through a colleague. The researcher was contacted directly by this individual offering to be interviewed, stating that DCM had had a “profound impact on her.” The researcher sent her a participant information sheet and a convenient time and place was arranged for the interview to occur. This participant was a ward manager of a long term and respite care dementia ward (Unit 2).

The final two participants, one female staff nurse and one female nursing assistant, worked at a day service for people with dementia (Unit 3) and were recruited for the purposes of theoretical sampling (see Section 2.4.5). Units 1, 2 and 3 were all fairly typical settings within the NHS for individuals with dementia.

Although the original aims of the research sought to investigate the impact of DCM on those individuals who had themselves been mapped, there were two

Table 1. Background Information on Participants

Code	Gender	Age band	Ethnicity	Nursing level	Current work setting	Years in profession	Years in current post
Participant A	F	31-40	White British	Nursing Assistant	Unit 1	14	11
Participant B	M	31-40	White British	Registered Mental Nurse	Unit 1	19	12
Participant C	F	41-50	White British	Nursing Assistant	Unit 1	7	4
Participant D	F	31-40	White British	Nursing Assistant	Unit 1	20	17
Participant E	F	51-60	White British	Nursing Assistant	Unit 1	18	15
Participant F	F	41-50	White British	Nurse Ward Manager	Unit 2	12	2
Participant G	F	41-50	White British	Registered Mental Nurse	Unit 3	19	5
Participant H	F	51-60	White British	Nursing Assistant	Unit 3	25	4

participants (Ben and Fiona) who had also become mappers. This only became evident to the researcher during the interview process. Ben had attended a DCM basic users' course, to train to become a mapper but had not undertaken any mapping at the time of interview. Fiona had undertaken several hours' worth of mapping (she was unable to specify exactly how many) and primarily used these experiences to inform the interview.

2.4 Procedure

2.4.1 Ethical approval

Ethical Approval was obtained from the relevant local research and ethics committee in August 2004 (Appendix 2).

2.4.2 Recruitment of participants

The researcher became aware of the DCM Co-ordinator in her area having attended a DCM basic users course. The co-ordinator provided the researcher with information about Unit 1. The researcher then contacted the ward manager and arranged to visit the ward to explain the research to potential participants. Participant information sheets (Appendix 3) were sent ahead of this meeting and were also provided when the meeting occurred.

On the recommendation of the ward manager, the meeting took place during a shift change over when more staff were available. In this case, eight members of staff were in attendance and a register was taken so the researcher was aware of to whom she had already spoken should she have needed to visit the ward again. Before introducing the study, the researcher felt it was important to engage the participants by sharing her own experiences of being a nursing assistant and acknowledging her

impartiality with regards to DCM. Participant information sheets were then provided and the research was explained. The staff were encouraged to raise any questions or queries with regards to the aims of the research. It was explained that staff could indicate interest in participation by completing the reply slip on their information sheet and that the researcher would return to the ward two weeks later to collect these slips.

On returning to the ward, five individuals had indicated a willingness to participate and a convenient time, place and date for the interviews to take place was arranged. The researcher then sent the participant a letter of confirmation, thanking them for their participation (Appendix 4). Interviews usually coincided with staff members finishing their shift and took place in a quiet room on the ward.

The ward manager of Unit 1 made the researcher aware of the staff on Unit 3. The process of recruitment from this unit was the same as for Unit 1. Interviews here took place in a quiet room adjacent the day service.

2.4.3 Data collection

Designing the interview schedule: Qualitative researchers advocate the use of the semi-structured interview, incorporating open-ended questions to encourage flexibility within the data gathering process (Burman, 1994; Smith, 1995). Due to the dearth of formal, objective research in the topic, data was collected using a semi-structured interview schedule (Appendix 5). Several factors were considered in devising the topic guides and these arose from the general literature on DCM, and the

researcher's experience of working in older adult settings as a nursing assistant and as a trainee clinical psychologist.

The literature highlighted that a DCM exercise comprised a process including preparation for the map, observation, feedback and follow-up. This was taken into account as the interview schedule was constructed. Literature was equivocal about DCM's impact on staff at a practical, practice development level (such as training), as well as some emotional and psychological effects (such as causing anxiety and attitude change). To account for these views, topic guides included addressing areas of possible change in the aftermath of a map and exploring the individual's feelings and reactions to the DCM process.

Achieving rapport with respondents is considered by Smith (1995) and was incorporated in the design and administration of the schedule. For example, the opening questions focused on eliciting the participants' experience of their client group; it was felt this topic would be familiar and safe for the interviewees, thus enhancing rapport.

Smith (1995) has also suggested that ordering of the questions is less important, flexibly allowing the interviewer to investigate any interesting areas that arise, whilst being cognisant of the respondent's interests or concerns. During the course of the interviews, the researcher was flexible in the ordering of questioning and time was made to follow other areas of interest that arose, such as previous employment experience and contexts, and learning processes. With the exception of Fiona, the topic guides remained constant.

It has already been acknowledged that Fiona used both her experience as a mapper and someone who had been mapped to inform the interview process. Fiona was also a ward manager and offered insights into the nursing profession and its interface with DCM. In this sense, a different interview ensued, however, the inductive nature of grounded theory methods assumes an open and flexible approach that facilitates investigations into new areas of interest that have relevance to the area of study (Charmaz, 2003). It was felt that the aims of the research did not preclude this participant's experience and it was included in the analysis - informing emerging theory, future research directions and the process of theoretical sampling.

Interview procedure: As interviews commenced, the researcher read through the participant information sheets to ensure that the participants understood the aims of the research, the limits of confidentiality and anonymity and to answer any questions about the process. The participant then signed a consent form (Appendix 6) and the interview commenced. Interview duration ran for up to 90 minutes and each interview was recorded on audiotape. At the end of interviews, the tape was turned off and the participants were invited to comment on how they had found the process. The researcher then wrote these comments, along with any observations about the process in a reflexive diary (Figure 1).

The audio taped interviews were transcribed by a secretary, using the guidelines recommended by Burman (1994) and George, Kaplan and Main (1985). The researcher then listened to the tapes whilst following the transcripts, filling in any missing words or phrases. Identifying details were removed and kept in a separate location from the transcripts.

Figure 1: Extract from reflexive diary

23/3/05

Have just interviewed my 6th participant and am aware that I did not impose as much structure on this interview as I have on the others. I think this was because she volunteered to be interviewed and also used her experience of being a mapper and a ward manager to inform what she said. Am aware that this has implications for theoretical sampling and I may want to interview another individual who has mapped and/or another ward manager. I was interested in her feelings about the psychology of the carer and feel this is relevant in terms of the explicit and implicit conflict processes that are emerging in other interviews. Perhaps need to look back through other interviews and examine this further.

1/4/05

Although I have enjoyed coding the data so far, am suddenly feeling very overwhelmed by it all and surprised at my own lack of delayed gratification. I find it so anxiety provoking actually waiting for something to emerge and having faith that it will.

2.4.4 Data analysis

Analysis of the individual transcripts was undertaken in line with the grounded theory approach adapted from Charmaz (2003). The approach advocates the data reduction techniques of line-by-line and focused coding, followed by memo writing and category development. This process, as it applies to this study, is described below.

Coding: Charmaz (2003) presents coding as the pivotal link between collecting data and developing a theory to explain the data. Line-by-line coding is the naming of each line of textual data, the aim being to take an analytic stance towards the work, whilst staying close to the actual facts. Focused coding is more selective and uses the most significant or frequent initial codes to sort, synthesise and organise large amounts of information (Charmaz, 2003).

The current researcher line-by-line coded by splitting the text into 'meaning units' and giving each unit a code that was written on the right hand side of the transcript. After initially coding the transcript, the researcher divided it into paragraphs and then recorded all initial codes from the paragraphs onto a computer thus creating the first stage of an electronic indexing system. Focused codes, that summarise the data more accurately and completely, were then selected. As the coding proceeded and similar themes began to emerge within the transcripts, the researcher coded larger meaning units with more abstract focused codes. For an example of line-by-line and focused coding see Appendix 7.

Category development: The method of grounded theory emphasizes identifying processes that emerge from the data, allowing the researcher to work beyond individual cases. When the focused codes had been identified within the transcript, all the initial codes pertaining to a focused code were grouped together under the focused code label. This was done firstly within transcripts, and then across transcripts. Permanent computer records were kept of each stage. At the focused coding stage, processes, and links between these processes began to emerge from the data, which directed the researcher to the formation of categories. To inform this stage of the data analysis, the researcher was cognisant of the following questions recommended by Charmaz (2003):

- What process is at issue here? How can I define it?
- Under which conditions does the process develop?
- How does the participant think, feel, and act while involved in this process?

- When, why, and how does this process change?
- What are the consequences of this process?

Category development began after the first four interviews had been coded. The researcher found it useful to go back through the transcripts and permanent computer records, using the focused codes as a prompt to recalling data. The categories, and the relevant focused codes that constituted them, were recorded once again on the computerised indexing system.

Category development began the process of constant comparison. Constant comparison involves looking at the data prospectively and retrospectively, and continually sifting and comparing elements of it to promote conceptual and theoretical development (Pidgeon, 1996). Creating a computerised indexing system for recording the initial and focused codes meant that the researcher could begin to construct a permanent record of category development as it occurred. However, this record could also be refined as the analysis continued and the constant comparison method illuminated new areas of interest. For a record of how the categories were developed and then subsequently changed and/or amalgamated see Appendix 9.

Memo writing: Category development and subsequent theory building was aided by the use of memo writing, a process which involves the definition of a category by its analytical properties. At the memo writing stage the analysis assumes a more narrative form. The researcher is able to become more investigative, progressing from summary description to a more abstract and conceptual level of understanding (Charmaz, 2003). Raw data, and empirical evidence are added to the memo to support

any developing ideas, thus increasing the strength of the emerging categories and their potential for transferability (Charmaz, 2003; Pidgeon & Henwood, 1996).

Charmaz (2003) advocated that memo writing encourages the researcher to investigate implicit, unstated and condensed meanings. At this stage there was a focus on the implicit and explicit factors that reflected the impact of DCM. Memos were created to describe categories pertaining to this impact, and these included examples of negative case analysis, cases that differed from the emerging accounts of the main categories.

A model of the impact of DCM was developed and is described in the next section. A diagram is presented with written accounts of the main categories emerging from the analysis.

2.4.5 Theoretical sampling

A further function of memo writing is to identify gaps in analysis that can be addressed through the process of theoretical sampling, the selection of further participants on the basis of emerging analysis (Charmaz, 2003; Strauss and Corbin, 1998). The first six interviews were conducted with individuals from long stay continuing care wards, thus it was felt to be important to address the question of transferability and two individuals were recruited who worked in a day service for people with dementia.

Theoretical sampling was also evident regarding the experience of people who had also been mappers. This opportunity had presented itself serendipitously to the

researcher when she interviewed Fiona. It was felt important to build on this, thus one of the participants recruited from the day service (Gwen) was selected because she had also been a mapper.

3.0 Analysis

3.1 Overview

This section provides details of the analysis of the eight interview transcripts. A process model conceptualising the impact of DCM is presented in Figure 2. The model consists of one core category and four main categories (which also contain intermediate categories) derived following the analytic procedures described Section 2.4.4.

The section begins with a brief description of the core category, followed by a depiction of the model to show how the categories relate to each other. The main and intermediate categories are then presented. To elucidate the categories and ensure that the analysis is grounded in the data, quotations are included in italicised text. Due to restrictions in word limit, references to the whereabouts of further quotations are also added in the text to aid the reader.

3.2 Overview of the core category

A core category named 'Conflict' was identified from the data. Several types of conflict were recognised in the transcripts, as listed below:

Conflicts:

- Of caring for someone with dementia.
- Of role
- Between staff
- Associated with the wider, systemic organisation
- DCM as a learning process both reducing and inducing conflict

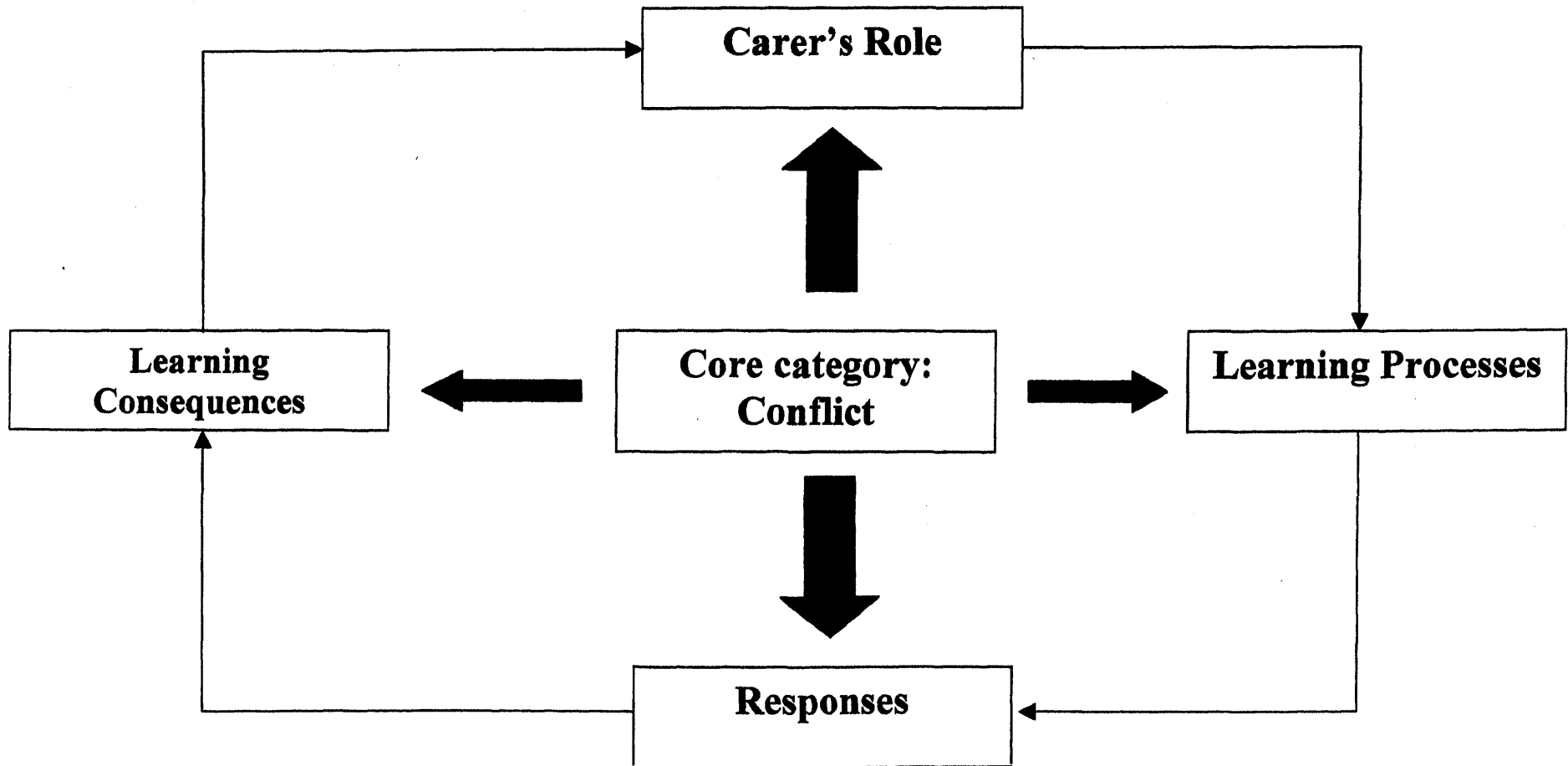
The core category represented the primary conceptual focus of the participants' narratives and encompassed five main categories: 'Carer's Role;' 'Learning Processes;' 'Responses;' and 'Learning Consequences.'

3.3 The process model

The process model depicted in Figure 2 illustrates the interaction between the main categories to show the general impact of DCM from the perspectives of being a mapper and being mapped. This represented a learning process, with learning consequences that both induced and reduced role conflict for the participants. The model demonstrates the participants' attempts to explore the impact of DCM, whilst considering their experience of being a care-giver to individuals who have dementia. Although this information was incorporated into the categories, the model may not address the complexities of wider contextual and employment issues that could be relevant to the impact of DCM. In addition, only two individuals were interviewed who had also been mappers, therefore the model is tentative when considering their experiences.

Arrows in the model demonstrate a process of movement between the categories. The core category of Conflict is placed in the middle of the model, radiating outwards because it impinges on all the main categories. The continuous movement between the categories represents a fluidity and continuity that is perhaps necessary for a DCM evaluation to have an impact.

Figure 2. A process model of the impact of DCM



3.4 MAIN CATEGORY: CARER'S ROLE

In terms of the participants' stories, the main category of Carer's Role sets a context for explaining the experience and identity of nurse caregivers who look after individuals with dementia within NHS continuing care wards and day services.

'...helping 'em to get up and getting undressed, and chatting and helping 'em with their meals, and to the toilet and er and to bed [um um], and to entertain 'em.' ('Emma:' 4, 83-85)

This category includes two intermediate categories: **Experience of Client Group** and **Changing Contexts** (see Figure 3 below).

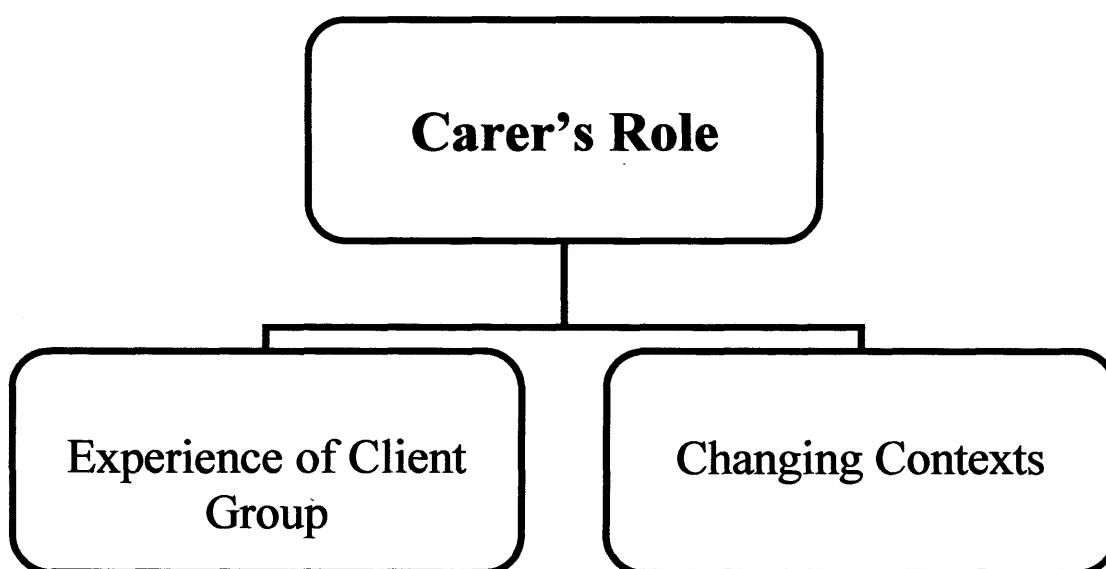


Figure 3. The role of the carer

3.4.1 Intermediate level category: Experience of Client Group

Participants had a minimum of seven years, and a maximum of twenty-five years experience working with individuals with dementia. Although the participants

represented three different levels of nursing: nursing assistant, staff nurse and a nursing ward manager, their experiences of the client group were congruent and included attempts to understand and facilitate the patient, the responsibilities of the carer's role and the rewards and challenges associated with this role.

All the participants attempted to understand and describe the consequences of dementia. It was acknowledged that there is a progressive loss of functioning that leaves the individual angry and aggressive, confused, insecure and disorientated. The inconsistent nature of dementia meant there were often communication problems and inconsistent, unpredictable behaviour.

'...and how the illness takes a full turn as well you know? Like they'll come in and they can some people can communicate with you and then they'll go through the next stage and that goes, that's hard to accept cos some of 'em are really chatty when they first come in.' ('Christine:' 3, 55-58)

In order to facilitate communication and comprehend certain behaviours, there was an active effort from all the participants to understand the person with dementia as an individual. In addition, five of the participants described identification with their own relatives, specifically, their parents and grandparents and this appeared to encourage empathy and compassion in their practice and they were able to take action to ameliorate the effects of the illness.

'Like when you're holding a conversation it's you've got to have the ability to talk a load of rubbish because like they'll start a conversation and then they're thinking that you were there.' ('Diane:' 7, 165-167)

This quotation suggests that certain qualities, such as sensitivity, were required of the carer in order to undertake their role. Although the majority of the participants felt this to be the case, it seemed problems in recruitment often prevented managers from employing individuals with these qualities ('Ben:' 26, 628-629; 'Fiona:' 31, 755-757).

All the participants described a complex and varied mixture of duties, tasks and daily actions undertaken in relation to the caring role and these often led to role conflict. Broadly speaking, these responsibilities were defined as actions with the aim of enhancing the psychological, social and physical well-being of patients. The participants felt it was their responsibility to provide all of these and not just prioritize the physical aspects of care.

'...I'm definitely not one to be pulling people along to get 'em dressed, get 'em fed, I'd rather spend time and just make it as best for them as possible. Definitely person-centred I like to do activities erm I like to get involved with that sort of thing.' ('Amy:' 6, 133-136)

Activities were separate from physical tasks often encompassing therapeutic pursuits with individuals and groups, with the purpose of enhancing the social well-being of

patients. Despite this, several of the participants not feel wholly positive with regards to their abilities to provide activities, perhaps denoting role conflict.

'I mean at the end of the day we're nursing assistants, we've been trained in basically nursing care and not activities.' ('Heather:' 11, 252-253)

The physical and social aspect encapsulated the 'doing' part of the participants' role. However, in addition to 'doing,' the importance of simply 'being' with a patient, offering them reassurance, choice and dignity, was also acknowledged as important by all of the participants.

'I'm gonna take my time with this patient and I'm gonna do, and I'm gonna sit, it doesn't matter, it's twenty-four hour care you know, if I want to sit with them for half an hour I can do and not get told off.' ('Christine:' 19, 449-452)

The issue of sensitive and empathic practice in relation to caring was alluded to above. Role conflict arose when there was incongruence between this ideal and what occurs in reality ('Amy:' 4, 83-86). Divergence transpired for all the participants when it was difficult to strike a balance between the 'doing' and 'being' aspects of the caring role, with the expectation that ward tasks were often prioritised to the detriment of the patients, and their individual needs were not considered.

'You know I mean because sometimes on wards I think you tend to (.) not that you don't care or you're not but you it's like a job that I worked on nights so you put them to bed, you get them into bed and it's like a you're on an

automatic pilot really and it's not that you don't talk to the patients you do but it's like well I've got to get this job done. ('Heather:' 15, 351-356)

The phrase 'automatic pilot,' denotes that in terms of daily responsibilities there wasn't much time for stopping and reflecting in order to provide a deeper, more sensitive level of care. Fiona illuminated the position of the ward manager in relation to this aspect of 'doing.' Her competence was based on certain responsibilities other than the psycho-social well-being of the patients ('Fiona:' 23, 553-558). In addition, she also acknowledged that there *'has to be a purpose behind all these tasks'* ('Fiona:' 35, 846). Perhaps 'doing' represented a more tangible purpose to which carers could relate. This is interesting considering Gwen's initial scepticism with regards to DCM.

'...when I did first about mapping I was very sceptical about how somebody could sit and just watch somebody.' ('Gwen:' 14, 342-343)

Furthermore, two of the participants felt that DCM would be more relevant and useful if the mappers stopped reflecting on the environment and started undertaking tasks ('Diane:' 59, 1441-1442). There was also some disappointment that the mappers did not see many of the duties related to physical caring ('Diane:' 48, 1177-1183; 'Emma:' 16, 389-393).

Principally, the rewards associated with the role related to reciprocity between the individual's need for care and the carer's provision of this. Being able to give care enhanced self-efficacy and self-esteem for six of the participants.

'...I just get a lot out of thinking that I've really helped somebody I've really helped somebody that's not necessarily been able to do everything for themselves.' ('Amy:' 3, 63-65)

Other rewarding features included positive feedback and validation from families and patients. In addition, patient-carer connections, achieved through both verbal and non-verbal communication, enhanced the care-giving relationship, allowing carers to feel they were doing a good job.

'...I know I'm doing a good job [uh uh] because they let me know in their way.' ('Christine:' 8, 172-173)

However, caring for someone with dementia also generated challenging elements to the role that engendered a sense of conflict for all the participants. These included the effects of the illness and the apparently discriminatory attitude of the wider society towards those with dementia that perhaps led the participants to question the value of their occupation ('Fiona:' 29, 702-704). DCM had offered Fiona some insights into the psychological impact of caring for someone with dementia and developed her perspective of how carers coped with this.

'My personal view is that staff actually behave in this very tasky way because that's the only way psychologically they can deal with the actual devastation that dementia brings with it.' ('Fiona:' 25, 604-606)

Fiona's quotation alludes to the nature of 'doing,' discussed earlier. She suggested that 'doing' enables carers to maintain distance from the individuals they care for,

thus allowing them to deal with the challenges of their job. Indeed, the participants appeared aware that it may be unprofessional to become emotionally involved with patients.

'I've gone in the sluice and cried [um]. I know you're not supposed, you're not supposed to get involved but when you've washed, dressed, fed, cleaned someone for so many years and then they, and yes there are some patients that you never get that bond with [um], but there are others that you do and you you can't help but get involved can you.' ('Heather:' 18, 430-434)

Other factors that presented a challenge to the role included the unsupportive and uncooperative attitude of families, and conflict between the carer and the wider, organizational system of the NHS. Six of the participants appeared irritated by the restrictiveness of the regimented, organizational structures that did not prioritize holistic care for the patient.

'...but the way things are structured in terms of a consultant, senior registrar, ward rounds, system the actual organization demands that meals are delivered at certain times, there's no consideration really for the patients at all.'
(*'Fiona:' 39, 940-943*)

3.4.2 Intermediate level category: Changing Contexts

Changing contexts relates to issues of context, specifically, professional changing practices, and different working environments, that affected the role of the carer either positively or detrimentally.

The majority of the participants described how changing practices occurred at different levels, from those on the ward and within the NHS Trust, to shifting political priorities. Participants often found themselves complying with the system, but changing practices and priorities were experienced as contradictory. In one case, this led to distrust of the authority making the rules and the carers were left feeling undermined and confused.

'...but it's just everything's just, there's that many bodies now saying this is better for somebody, that's better for somebody, you've got to do this with the person, you've got to do that with the person...that everything's getting confused.' ('Diane:' 12, 284-288)

Differing environmental contexts affected the role of the carer both positively and negatively. With the exception of Diane, the other four participants from Unit 1 felt largely satisfied with their present working environment because the general ethos facilitated learning and development, an example of this being the DCM evaluation.

'...that's one of the reasons I came here because it was more open and more willing to try things.' ('Ben:' 10, 233-235)

In contrast, the non-progressive and insensitive nature of past environments had induced stress within three of the participants. In these situations, the participants were not working in concert with their values and did not regard themselves as providing optimal care for the patients.

Negative case from Unit 1: Diane has been selected as a negative case because she did not value her current working environment (Unit 1) in the same way as her fellow colleagues. She did not like the physical layout of the ward (*'Diane:' 17, 402-404*), or feel valued in her role (*'Diane:' 58, 1463-1465*), which she felt was continually affected by the changing nature of practices (see quotation above).

Two participants (Gwen and Heather) worked at a day service (Unit 3), however they also had experience of working on continuing care wards and this was also alluded to during the interviews. There were similarities and differences between the two contexts. Although the patients were still perceived to have dependency needs, the day service provided less intense physical care and the aims were to assess and maintain the skills the individuals with dementia already possessed. However, as the following quotation denotes, role conflict was still apparent within this environment with regards to not feeling able to help people who are perceived as needing help.

'...hard because if we have a meal of something they're struggling with it you can't it seems like you know they can't, you feel you want to help them and you know that you've gotta sort of stand off.' (*'Heather:' 3, 66-68*)

3.5 MAIN CATEGORY: LEARNING PROCESSES

The category Learning Processes was defined as the participants gaining knowledge through a variety of means (e.g. a DCM evaluation), which may, or may not augment their role as a carer.

'I've been on courses, we read up a lot on dementia, do a lot of reading up, there's study days you can go on, you know so that's how I've learnt a lot about it and listening you know, listening to the trained staff [uh uh] about things.' ('Christine:' 5, 100-102)

The category encompasses a focus on the structured learning processes embodied in a DCM evaluation. However, other methods of learning were discussed and these are addressed briefly. Participants' responses to and the consequences of these learning processes are presented in the following two main categories. The category Learning Processes is divided into the intermediate categories of **Structured Learning** and **Unstructured Learning** (see Figure 4).

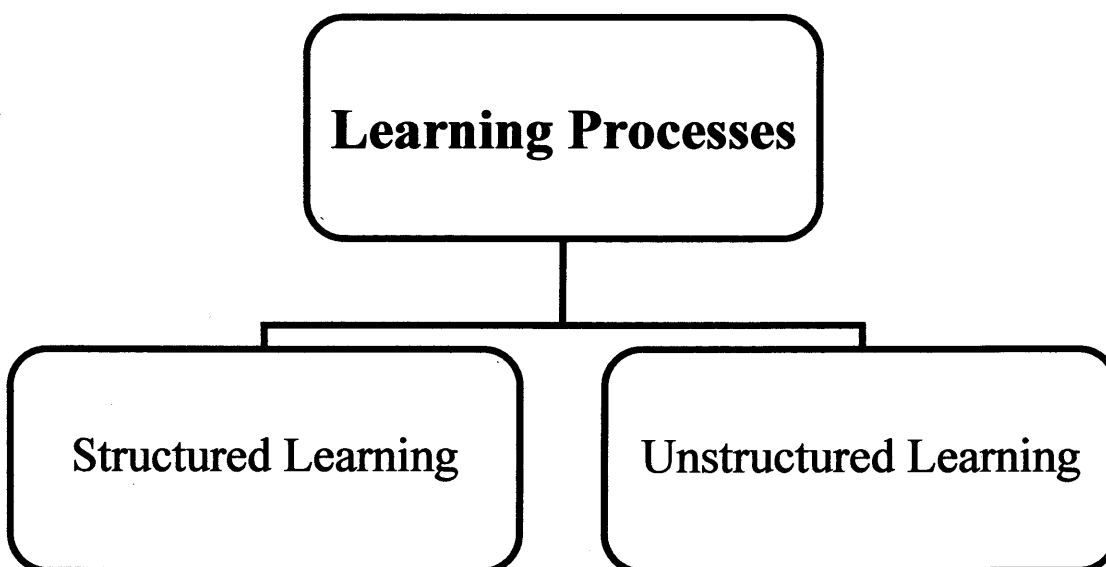


Figure 4. Structured and unstructured learning processes

In general, all the participants viewed learning and training as necessary to enhance their skills, update themselves and become more reflective about their work. Both structured and unstructured learning processes provided motivation and validation to the carer's role, and reduced isolation through the sharing of ideas.

'I think it's important when you go out on study days to meet other people to compare notes.' ('Ben:' 6, 137-138)

3.5.1 Intermediate level category: Structured Learning

Structured Learning relates to formal, planned and organised methods of learning. Some of the nursing assistants had undertaken National Vocational Qualifications (NVQ). All the participants had taken part in courses and training days and were positive about the experiential learning received. Seven participants had attended a person-centred care study day prior to experiencing the DCM exercise. Anecdotes, imagery, role-play and stories provided at such training events were also informative ways of learning.

'... it gave me a better meaning, a better understanding from that one word being in a fog.' ('Emma:' 35, 845-846)

The observation and feedback component of the DCM evaluation represented another opportunity for structured learning. Seven of the participants described that prior to the mapping exercise, the local DCM Coordinator (referred to in the transcripts as Staff 1) visited the ward to discuss the DCM exercise and address their queries. In addition, two participants had prepared using prior reading.

However not all staff on Unit 1 felt prepared for the map as information was not always passed on; in consequence one participant was unaware of the map until it happened. Thus despite the initial training and preparation, several of the participants described a level of uncertainty about what the map would entail.

'...I think everybody on the ward felt that, you know, even up there felt that as well you know because it was it was different, it was a new thing, never been done and, and everyone's, oh God what's gonna happen.' ('Christine:' 17, 408-410)

Three participants had also completed the learning process to become a mapper. These individuals gained knowledge of the DCM coding system. Although Gwen felt the coding system made sense, she admitted to having difficulty using it and admitted she needed some practice ('Gwen:' 9, 215-222). However, Fiona found it to be immediately accessible.

'I can actually very quickly relate to the figures and the data, I quickly could relate to the scoring and the behaviours erm and it made it and, I almost got to a point where I was doing it constantly in in everyday life with everything.' ('Fiona,' 2, 34-37)

Although all three had attended a DCM basic user's course, Ben had not done any mapping and was apprehensive about becoming a mapper, perhaps because he was

aware that this would put him in a position of power that others would find threatening (*'Ben:'* 29, 702-704).

Finally Ben and Fiona described using DCM, and the research associated with it, to provide learning. Fiona felt she was well equipped to do this because she had had experience of both sides.

'...and I feel I'm in quite a good position to do it because I've got some credibility with the people that are supposed to be doing it, do you know what I mean? So I can at least say to them well, well actually I know what it feels like.' (*'Fiona:'* 34, 817-820)

This notion of having had experience of both sides seems important when providing novel learning processes which imply change. Distrust of authority can be generated in changing working contexts (see Section 3.4.2). However, if the authority providing the learning appears to empathize with the learners, this may permit further authentication of structured learning processes like DCM.

3.5.2 Intermediate level category: Unstructured Learning

Unstructured learning encompasses learning processes that are predominantly vicarious and implicit such as modelling, learning through observation of others. Ben, a qualified member of staff, described such a two-way learning process.

'Yeah, well its just erm like you say that's how I've learnt, er most of the experience I've gained is from watching people, good and bad, how they deal

with people and how they nurse people. So I'm very aware of the impact I have on other people through nursing.' ('Ben: ' 13, 314-317).

Learning also occurred in an ad-hoc, unplanned manner both through personal experience and positive transference of caring for family members. The participants also described providing each other with feedback during staff meetings. However, Diane felt that the infrequent nature of these meetings reduced their utility ('Diane: ' 52, 1273-1277).

Staff sharing also occurred in the day centre and was easier to arrange because they did not work shifts, thus leaving more time for communication and support. It was on these occasions that DCM was discussed.

'I think here we have a lot more time to sit down and discuss things and because we're all here between 8.30 and 4.30 and we don't have overlaps and people not seeing each other for a week.' ('Gwen: '41, 998-1000)

3.6 MAIN CATEGORY: RESPONSES

Responses are defined as how participants perceived and subsequently reacted to the structured learning processes described above. There is a concentration on structured learning processes because they appeared to evoke a more obvious response than the vicarious, unstructured learning procedures described in the previous category. The main focus of this category is the response to the observational and feedback aspects of the DCM evaluation as a learning process.

'I was worried (laughing) coz er a lot of the girls who I'm working with, the mappers were sitting in the day room and they were keeping out of the day room because they didn't want to be seen by them, they didn't want to be watched.' ('Ben:' 14, 324-327)

DCM as a learning process comprised several parts. The initial course on person-centred care and the preparation undertaken were addressed in the previous section. Five of the participants responded positively to the course and the use of role-play.

'...it was the way he did it erm, the roles he played cos he did role-play, erm he's brilliant and he has got everything off to a tee.' ('Diane:' 22, 518-519)

However, a level of uncertainty with regards to the next phases, which included observation and feedback, still existed. These aspects of DCM make up the intermediate categories: **Being Observed** and **Receiving Feedback** (see Figure 5 below). Two individuals had been mappers, and their response is presented as a negative case.

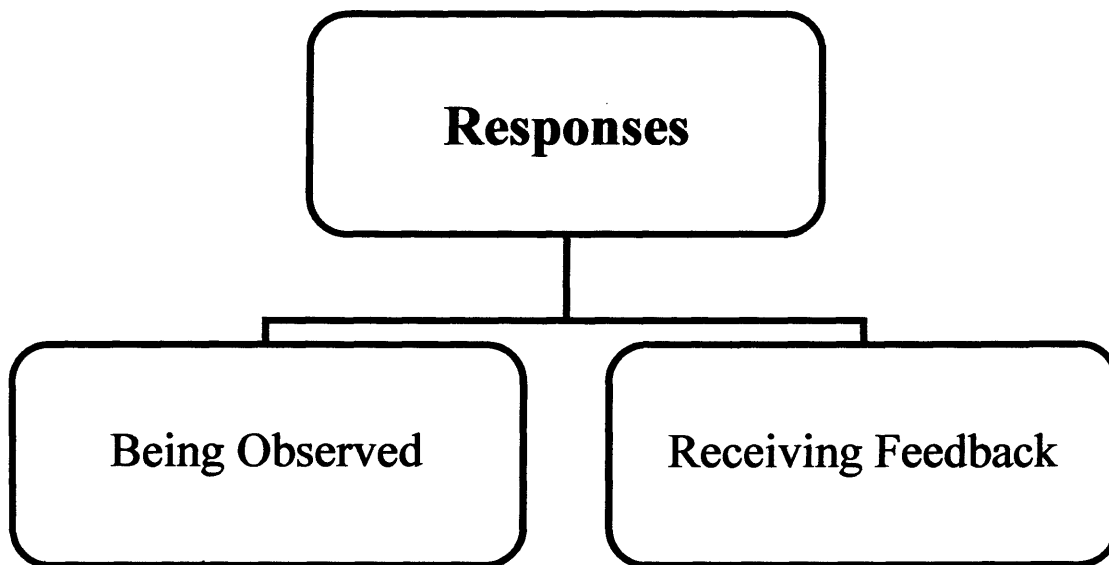


Figure 5. Responses to being observed and receiving feedback

3.6.1 Intermediate level category: Being Observed

This section relates to the participants' perceptions and reactions to being observed. The uncertainty of the process, coupled with unfamiliar mappers, served to fuel any initial anxiety all the participants initially felt about being observed.

'I think you always have this feeling that you're doing something wrong when somebody's watching yer.' (Christine: '13, 312-314)

Feelings with regards to being observed fluctuated from feeling unconcerned about the process, to expressing doubt and worry. Lack of concern appeared to be linked to how the participants perceived themselves as carers, who they felt the mappers were watching and the fact that it was for the benefit of the patients.

'...but when you know why its, why its being done then it shouldn't matter how you feel really well I don't think so. It's for good, you know it's beneficial.'

('Amy:' 11, 258-259)

However, the predominant view amongst the participants revealed that the evaluative experience of DCM, where the carers believed they were under scrutiny, led to perceptions of threat, feelings of paranoia and anxiety and fear of judgement.

'...you're always aware that they're there if you're doing something and while your actually doing it you see them pick up a pen and tick a box then you can't help but think, what have I done?' (*'Ben:' 14-15, 345-347*)

Similarly, the majority participants doubted themselves as carers and the motives of the mappers, leading them to feel self-conscious whilst being observed.

'...you almost feel as if you're in a goldfish bowl kind of being watched whatever you do and you're very, very conscious of the way you approach people, you're very conscious of every movement you make and you feel as if every, everything that you're doing is kind of false, you're not being yourself because you're being watched so intensely.' (*'Gwen:' 19, 460-464*)

All the participants explained how their own behaviour and that of their fellow colleagues changed in diverse ways, including wanting to avoid the mappers for self-protection, expressing anger and putting on a performance that was perceived as false.

'...you take patients to the toilet four times rather than two, do you know what I mean? You do everything more just to avoid the area where they are.'

('Diane:' 31, 747-749)

There was a propensity for some of the participants to discuss the experience and behaviour of others with regards to DCM as different from their own. This factor, coupled with a concern that the good practice displayed during a DCM map was not sustained, could be regarded as evidence of interpersonal conflict amongst the carers.

'...this is what I find a bit frustrating is that how can somebody (.) if someone is aware of how they should be, why aren't they like it all the time?' ('Amy:' 12, 269-271)

Two participants viewed DCM as intrusive and disruptive due to the fact that these unnatural reactions changed the atmosphere and equilibrium of the ward.

'...you can't go in there and interfere with that patient just because somebody's watching you and I found but we had to you, you know and I found that very difficult because we were invading that person's space.' (*'Diane.'* 38, 924-926)

However, perceptions and reactions to participants fluctuated. The more familiar they were with the mappers and the actual DCM process, the more they relaxed (*'Christine:' 14, 341-342*). Similarly, it seems that the personal characteristics of the mappers were important in reducing the level of perceived threat associated with being observed. It was preferable to have mappers open and transparent to the process

and who made an effort to integrate themselves with staff and patients during the observation period (*'Diane:' 32, 773-775*).

Negative case: Fiona and Gwen experienced similar feelings to the other participants whilst being observed, but the experience of being observers permitted different responses. They expressed a preference for being mappers and, through this process felt they had gained insider knowledge that enhanced their learning, enabling them to plan to achieve higher scores.

'...you go to these people that they're looking at and because obviously you want to get higher scores so yeah I suppose you are aware of where people are sitting and who they can see from that sitting position.' (*'Gwen:' 24, 584-586*)

Fiona experienced an intense reaction after periods of mapping (*'Fiona:' 12, 289-295*). She reacted to what she had observed by seeking out information and undertaking further research in an attempt to understand her feelings.

'...but dementia care mapping in itself when you're doing it almost, it made me realise how simple it was and made me question why the staff didn't do it, and I then went away and looked at a lot of research about why people worked the way they do.' (*'Fiona:' 5, 118-121*)

It is also interesting to ponder Fiona's admission that she couldn't help but judge the carers' competency, in her capacity as a mapper (*'Fiona: ' 10, 223-224*). Taking this into account, perhaps the other participants' fears were justified.

3.6.2 Intermediate level category: Receiving Feedback

Similar to the previous intermediate category, this encompasses the participants' experience and reactions to receiving feedback. Accounts suggested that responses could fluctuate as mapping and subsequent feedback continued.

For some, the feedback represented a criticism and it appeared incongruent with self-perception as a carer.

'...to start with I thought no that ain't me I do my job well ('Christine: ' 32, 781-782)

Furthermore, the participants felt their practices and interactions with the patients were being questioned. In four cases this meant they reluctantly changed their behaviour, despite the fact it felt incongruent to their working environment.

'...one of the things they picked up on was the fact that I was saying a lot of "my love" and "me dear" and all this (.) but one of the things about this ward is that we're very because its, a lot of these have been here a long, long time, this is their home so we like to to be like family really.' (*'Amy: ' 15, 359-363*)

DCM feedback had the potential to exact a strong emotional response from all the participants. As the following quotation shows, the wording and terminology of DCM played a part in these perceptions.

'Very offended and upset, you know yes I mean just the word ill being it's as though you were treating that person badly which I mean I er Staff 1 actually did say that If a person is in ill being, they are being neglected and you know and it it's just the way things are worded.' ('Diane:' 48, 1160-1163)

If feedback was considered critical, some of the participants became defensive, feeling the need to justify their behaviour and preserve their practices. In contrast, some reflected on their practice in light of feedback and wanted to improve for later DCM exercises.

'...you've got areas where you could improve and you know someone's coming back again to re-map you, it's time to address those, so you can say look we've tried, this is what we've done because you don't want them to come back and think that nothing's changed, you've been told how to improve things and you should have done it.' ('Ben:' 25-26, 618-622)

This last quotation seems to denote that Ben was motivated to act on the feedback and improve things, perhaps because he, like four of the other participants, perceived the feedback to be balanced, positive and constructive.

'The fact that it was constructive, anything that was negative was put across very positively and very constructively and you you know you can sit down then and find a way round that or a solution.' ('Gwen:' 26, 630-632)

However, Diane felt that motivation such as Ben's was damaging because it meant that the qualified staff diminished the positives for the unqualified staff by focusing solely on the improvements that were required.

'...it was only about one patient that was actually in ill being. Everybody felt so chuffed because you done a good job with everybody else but (.) people tend like the trained staff were swayed away from that and just well we've got to make more effort with that person now so we just got the negative feedback.' ('Diane:' 48, 1166-1170)

In diminishing positive feedback, the reinforcing potential of DCM also reduced and three of the participants responded defensively, unable to remember approbation.

'I can't remember what the positives were.' ('Amy:' 17, 391)

As with the previous section, all the participants' responses to DCM feedback denoted an ambivalence of both benefit and threat. However, Fiona suggested that the continuous process of multiple maps could resolve this dilemma ('Fiona:' 18, 434-436). It has been demonstrated that people's perceptions of and reactions to DCM can change when it represents an ongoing progression. This issue is addressed in the final main category.

3.7 MAIN CATEGORY: LEARNING CONSEQUENCES

This main category addresses what the participants felt they learnt as a result of the DCM evaluation.

'I think a lot more about what I'm doing and why I'm doing it.' ('Amy:' 19, 450-451)

Although learning consequences occurred, they were affected by numerous factors, which either sustained or obstructed learning. These are addressed in the intermediate level categories of **Identifying Outcomes**, **Sustaining Learning**, and **Obstructing Learning** (see Figure 6).

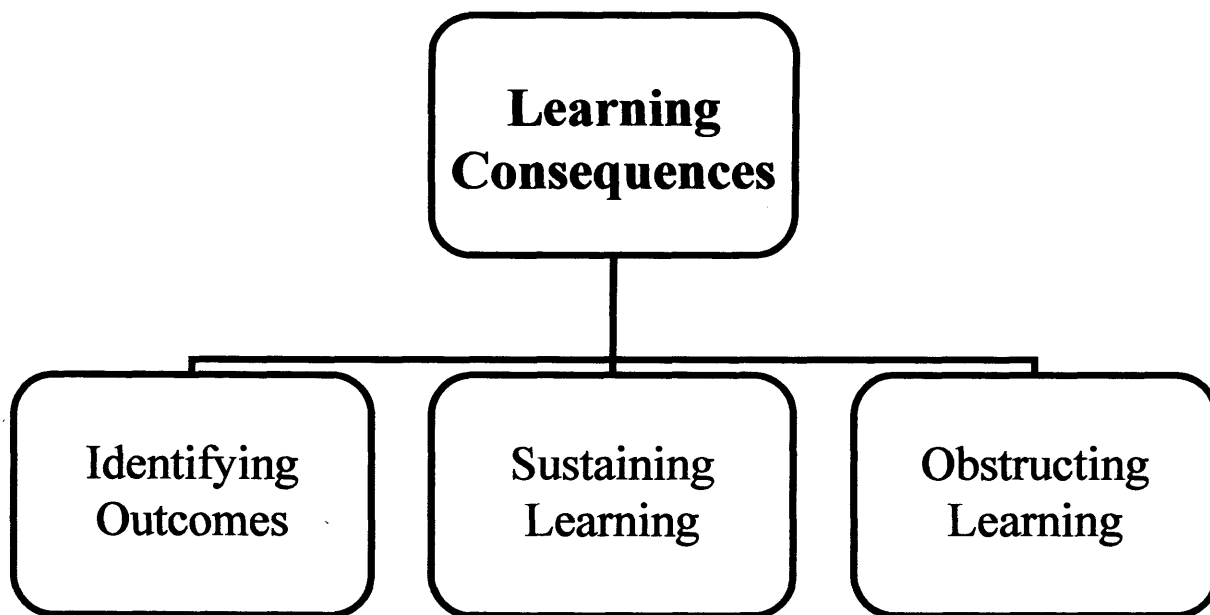


Figure 6. Learning consequences

3.7.1 Intermediate level category: Identifying Outcomes

The category Identifying Outcomes describes what participants actually learned as a result of the processes described in Section 3.5.

The use of role-play, anecdotes and imagery provided at training events promoted active discovery, furnishing seven of the participants with an approximated experience of what it might be like for someone with dementia.

'They did a lot of play acting as well, about people with dementia and how they feel, how a person with dementia feels, he went through it like a day [um] and I thought that were really, really good and that does make you understand dementia.' ('Emma:' 23, 552-555)

For seven of the participants, this encouraged increased awareness about more sensitive forms of person-centred care. Furthermore, they gained enhanced identification and empathy with the patients, which was incorporated into practice allowing them to become more insightful about the effects of the disease and the behaviour that was manifested ('Amy:' 21, 498-506; 'Ben:' 3, 50-59). Learning outcomes also included the participants being more reflective and exploratory in their practice and expanding their repertoire as a carer.

'I thought well she was shouting although I was talking to her and I couldn't quite get me head round that you know and that took a while but then you know I, I stood back and I thought yeah he is right and I should perhaps have moved her out of the environment where it was perhaps a bit more quieter.'
(*'Christine:' 29-29, 691-695*)

'It does make you think.' ('Emma:' 7, 161)

The dichotomy between the 'doing' and 'being' aspect of the carer's role has been addressed in previous sections. It seems that DCM afforded the majority of participants with a framework for permission to be.

'...it does give you the green light to say yeah you're not here just to wipe bums and feed people you can treat them as human because they are human beings and they do need stimulating, but you, I think you come in and you don't realise that.' ('Christine:' 42, 1014-1017)

In addition to provision of knowledge, the learning outcomes of DCM also included reinforcement of the value of the carer's role. Positive feedback from a DCM evaluation allowed six of the participants to recognise that they were doing a good job.

'Well it made as feel as if we were doing most of it right, that's very important.' ('Heather:' 26, 624)

This form of professional validation was recognised as important, but rare in terms of the carer's role ('Ben:' 16, 385-389).

Being a mapper appeared to be reinforcing ('Fiona:' 3, 61-64) and informative, facilitating increased awareness through recognition of both the patient's and carer's perspective. The opportunity to observe and reflect, provided those who had been mappers with a deeper, and perhaps more intense, level of understanding and

compassion about the care environment, and the general impact of actions undertaken by staff members.

'...I suppose you feel sometimes as well I've never noticed that before and you you pick things up that you wouldn't have thought of in how people are approached.' ('Gwen:' 10, 230-233)

'...while I was doing going through the DCM and while I still do it now, I do an awful lot of internal analysis you know and and reflection and er and actually try to understand, I try to understand why staff do what they do.'
(*'Fiona:' 8, 175-178*)

Finally, four participants described how the actual facts and figures produced from a DCM evaluation had consequences in terms of elucidating staff shortages and environmental problems. In this case DCM highlighted that both Units 1 and 3 needed an activity organiser.

'I think we've been made more aware how much more we needed activities organiser.' ('Heather:' 27, 646-642)

3.7.2 Intermediate level category: Sustaining Learning

Sustaining Learning relates to factors necessary to preserve learning consequences. Sustained Learning was more apparent when the participants regarded DCM as an opportunity for learning through constructive criticism. These individuals were able to use DCM to grow professionally and enhance their practice.

'I didn't find it threatening at all. I mean I was looking for people to highlight where we'd fallen down because I think that's important, that's how you learn I didn't feel as if it was an attack on me personally.' ('Ben:' 16, 365-368)

This process was facilitated if DCM represented a continuous progression deploying multiple maps, reinforcement and repetition, allowing the staff to feel successful. Information in Section 3.6 demonstrated that some participants' perceptions and reactions were subject to change as the maps and feedback continued. Christine warned of the dangers of a lack of continuity.

'I think you can't just come in and do one and then disappear because people do get negative thoughts from it. I mean we all got negative thoughts with the first one because we thought we were being watched because we weren't doing our jobs right.' ('Christine:' 33, 804-807)

She described how through the repeated reinforcement of several maps, she was able to explore trial and error options of different interventions with the patient, thus sustaining her learning.

'...you sit back and you think out the box, and your options are more you know you, you, you do think well that's not just an option just sitting there I could have moved her, I could take her in the garden.' ('Christine:' 29-30, 717-719)

Fiona acknowledged the importance of individuals responsible for change who were integrated into environments in order to continually strengthen, maintain, and enhance learning (*'Fiona:' 6, 135-141*). Ben also acknowledged the necessity of

continual reinforcement ('Ben:' 28, 669-677), and Amy provided some evidence for this occurring on the ward through a change agent.

'I think what you've gotta have is a member of staff whose permanently on the ward who does it, whose very erm into it, who really wants it and then, we have got a girl on the ward, a nurse on the ward and she's really she is really into it and she does tend to bring things up and she'll mention to people you know that's not quite right, or it would be best if you did this but I think that would have more impact then somebody coming in cause I do believe it can be quite false what they see.' ('Amy:' 26-27, 636-642)

This quotation suggests that learning is sustained through repetition and reinforcement from a person who is integrated on the ward, committed to the process and feels confident enough to continually demonstrate aspects of DCM through encouragement and modelling. This is also supported by evidence in the previous section where individuals' responses to being observed and receiving feedback changed for the better when it was done by a member of staff they knew and felt comfortable with.

3.7.3 Intermediate level category: Obstructing Learning

This category recognises those issues that obstructed the learning potential of DCM. These comprised characteristics of the DCM learning process that were considered as limiting, as well as personal and wider contextual factors that restricted the learning consequences.

Once again ambivalence was expressed towards aspects of DCM. Although the majority of the participants acknowledged that they had benefited from DCM accelerating their learning, three individuals felt it did not teach them anything they didn't already know nor did it have a lasting impact on the environment. They also conceived that this development would have occurred anyway, as a result of personal and moral values concerning their own behaviour and other learning experiences.

'...so again it's just, it's reinforcing what you would have found out anyway, or seen anyway from how other people nurse and how I've nursed over the years.' ('Ben:' 19, 446-448)

Diane felt that DCM had been imposed on the ward ('Diane: 56, 1370-1372), perhaps meaning it was another example of the inconsistent, changing practices that encroached negatively on the carer's role. Diane did not feel valued in her role and this coupled with her distrust of authority, perhaps prevented her from feeling reinforced by DCM and thus learning from it.

'...with his role play it was brilliant, but when he's treating you like dirt you just, you feel like sticking two fingers up at him.' ('Diane:' 50, 1222-1223)

The importance of everyone gaining feedback was expressed by seven of the participants.

'...they should have made sure that everyone had a feedback shouldn't they?'
(*'Emma:' 15, 535-354*)

However, the participants felt that their working schedule and employment status often precluded this, meaning the reinforcing aspects of DCM were diminished.

Fiona expressed that the nature of group feedback reduced its potential because individuals could choose whether or not to take it on board (*'Fiona: ' 29, 707-712*). Some of the participants' defensive responses to feedback, depicted in the previous section also suggested that the potential of feedback was not fully explored. Indeed, in the aftermath of the DCM evaluation, some of the participants expressed that they would have appreciated some form of follow-up and support, allowing them to explore the impact and learning consequences of DCM more thoroughly (*'Christine: ' 36, 883-887*). This was also evident with mappers.

'...it's like opening your can of worms you can't put a lid on, there's no, there's no kind of counselling when you're a mapper.' (*'Fiona: ' 43-44 1065-1066*)

The characteristics of DCM that were considered restrictive were its relevance and utility to the care environment and with individuals in the later stages of dementia, as well as the fact it created a false impression of the care environment. Financial barriers, lack of motivation to change, perception of the mappers, the varying nature of the participants' working environment and patient turnover were also regarded as limiting DCM potential. In addition, Fiona felt that the unacknowledged effect of caring for someone with dementia on a daily basis may prevent them from using DCM effectively.

Wider organizational issues impacted on the learning consequences of DCM (*Fiona: 19, 450-453*). Amy described visiting other hospitals to learn about the benefits of sensory equipment. However, the learning was not carried through due to the rules and regulations imposed within the organizational structure, and this limited progress.

'...it's a bit frustrating when you, when you go and you learn about these things how beneficial they are and then nothing well something come of it but then it got lost again.' (*Amy: ' 8, 188-190*)

Fiona's experience of DCM had been such that she felt learning needed to evolve from a team shift, with good leadership for it to have significant impact (*Fiona: ' 25-26, 628-632*). The information presented here indicates that both internal, personal factors and external, organisational structures, within the settings explored, impinged on learning processes such as DCM and had the potential to limit its impact and effectiveness.

4.0 Discussion

This section provides a summary and interpretation of the analysis and is presented in light of existing dementia care mapping (DCM) literature and mainstream literature. A brief methodological critique is provided, as well as clinical and research implications.

The aim of the study was to provide a theoretical account of the impact of DCM on nursing staff. Subsidiary objectives included exploring:

- Nursing staff's stance in terms of philosophy of care.
- Feelings about being observed and receiving feedback.
- Changes in attitude with regards to the people they care for.
- Effects the map may have had on personal and professional development.
- Long lasting effects in terms of a change of culture of care.

The analysis presented has gone some way to address these aims, from both the perspective of being a mapper, as well as being mapped, and has contributed to the DCM and mainstream literature pertaining to staff development and care of the elderly. The findings are congruent with those of the DCM research and add some substance to unsubstantiated hypotheses made in the literature about staff attitudes, morale and abilities.

Two objectives were not met; these were change in culture of care and changes in attitude to the client group. Considering the first of these, it seemed that, although the participants described learning consequences as a result of DCM, the lack of

continuous mapping exercises, as well as organizational restrictions, perhaps precluded an actual change in culture of care from happening. With regards to changes in attitude towards the client group, the results and analysis did not indicate that this occurred due to DCM. However, what was evident was a change in attitude in terms of how the participants viewed themselves as carers in relation to their client group as a result of DCM.

4.1 Overview of the results: Exploring impact

The process model portrays a core category of conflict, which permeates the four main categories. Taken together, these conceptualize the participants' experience of DCM and the impact of DCM from both the perspective of being a mapper and being mapped. The category of carer's role was key in this sequence. Learning processes such as DCM interacted with the characteristics of this role, evoked a response and produced learning consequences that potentially contributed to staff development, thus altering the role. Furthermore, the impact of DCM was such that it had the capacity to induce and reduce conflict for the participants in terms of their identity as carers.

4.1.1 DCM reducing conflict

A substantial part of the carer's role involved understanding the person with dementia, both as an individual and in terms of the illness. DCM as a learning process was regarded as a vehicle through which this knowledge could be learned, increased and refined, especially if the participants perceived the feedback as constructive. In this sense DCM was used to expand their repertoire of providing care.

DCM produced learning consequences that offered participants the opportunity to partake in reflective practice and enhance their knowledge, which was viewed as important. The participants gained increased empathy and awareness of the impact of their own actions in the care environment. This seemed especially pronounced with regards to those individuals who had mapped, where a greater sense of compassion evoked strong emotional and physical reactions for one individual. Substantiating the carer's understanding in this way aided patient-carer connections that were indicative of the rewarding aspects of the role. In addition, staff were able to explore other reasons for patient behaviour perceived as challenging and difficult.

DCM, and the research associated with it, represented an explicit framework within which to encompass and strengthen the participants' practice and identity as carers. This was especially pronounced with providing psychosocial care, which was in concert with the participants' personal values. DCM was also shown to have the capacity to positively reinforce the role of the carer, allowing participants to feel professionally validated.

Taken together, such findings represent the aspects of DCM that reduced conflict for the participants, aiding job satisfaction, staff development and enhancing the carer's role. This was in keeping with the literature describing the use of DCM in staff development where the objective was to endorse positive aspects of practice, promote new learning to enhance care and address areas of concern (Barnett, 1995; Brooker, 2002; Brooker *et al.* 1998; Lintern *et al.* 2000a & 2000b; Martin & Younger, 2000; Martin & Younger, 2001; Younger & Martin, 2000). An exploration of how DCM aids staff development is presented in Section 4.1.3.

4.1.2 DCM inducing conflict

DCM also had the potential to induce conflict and threaten the carer's role. This is reflected in the participants' responses to being observed and, in some cases, receiving feedback. Perceptions of threat with regards to being observed led the participants to feel anxious and unsure of themselves as carers. Some of this anxiety occurred because mappers were perceived as judgemental and, considering Fiona's admission about judging competency whilst mapping (*'Fiona:' 10, 223-224*), the participants' anxiety was perhaps justified. However, mappers who were familiar, open and more communicative made the process easier. Perhaps this transparency, which is encouraged in the literature (Innes and Surr, 2001), countered the unhelpful assumptions that led to negative perceptions.

Despite this, however, anxiety felt by participants in the presence of the mappers appeared to trigger unnatural reactions that encompassed avoidance or over compensation in the presence of the mappers, threatening the equilibrium of the ward. Those individuals who had been mappers also admitted to changing their behaviour and trying to create the perfect environment when they themselves were mapped. The DCM literature and course handbook acknowledges the Hawthorne Effect when staff put on a 'good show' that may influence the results and this is excused for several reasons:

- Caregivers are typically too busy to do anything far out of the ordinary, and will very soon accept the presence of the observers.

- When caregivers do try harder, they can only do so using the skills and insights they already have and their additional efforts are simply an extension of what they ordinarily do. Higher scores do not necessarily result.
- When Hawthorne Effects do occur in a positive direction, the experience may provoke a care team to discover something of its hidden capability. If this happens it is a bonus, and it can be highlighted in the feedback session; for the prime aim of the whole enterprise is to improve the quality of care.

(Bradford Dementia Group, 1997, p.13-14):

The current research suggests that the above may not necessarily occur straight away, especially if the potential of feedback is not realised and consolidated, and the staff perceive that things revert back to normal, remaining unchanged when the mappers have gone.

Defensive reactions from the participants were also indicative that DCM had the potential to induce conflict, especially when positives were not dwelt upon, and feedback was perceived as a criticism and taken personally. It is acknowledged in the results that the participants often referred to conflictual experiences of others as being separate from themselves. The researcher was interested in why this occurred.

Perhaps it represented a more implicit defence mechanism of projecting uncomfortable feelings onto others in order for the participants to manage their own conflict in terms of DCM. The idea of employing defence mechanisms is congruent with psychodynamic concepts (Hall, 1999).

The fact that DCM both induced and reduced conflict perhaps explains the ambivalence experienced when participants described simultaneous positive and negative aspects of the learning tool. This feature, coupled with the fact that DCM can induce conflict and anxiety is reflected in the literature (Bolton *et al.* 2000; Brooker *et al.* 1998; Buckland, 1995; Neel, 2002; Packer, 1996).

4.1.3 DCM as a learning process aiding staff development

The current research has demonstrated that one of the main strengths of DCM is its role in the professional development of nursing staff and the participants' experience of this tool, especially the aspects of it that reduce conflict, are evidence of this. The final category examines the learning consequences of DCM and how these are sustained and obstructed by the following:

- Internal, personal dynamics relating to individual carers
- External factors indicative of organisational structures and regulations.
- Aspects of DCM considered to be limiting

Participants' questioning the utility of DCM with individuals in the later stages of dementia is supported by the DCM literature (Perrin, 1997a & 1997b, Wilkinson, 1993). Furthermore, the notion of there being individual (internal) and organizational (external) levers and barriers to implementing strategies of change is congruent within the DCM and mainstream literature regarding change of healthcare professional behaviour (Cheater, Baker, Hearnshaw, Robertson, Hicks, Oxman & Flottorp, 1999; Funk, Champagne, Wiese & Tornquist, 1991; Hearnshaw & Baker, 1999; Robertson,

1999). This literature acknowledges that change is related to and affected by the following factors:

- Confidence in one's own knowledge and skills required to undertake the change
- Beliefs about the consequences of the change
- Beliefs about own capabilities
- Physical and social environmental factors
- Emotional factors associated with the change (such as stress and loss)
- Goal intent
- Goal planning

Many of these factors are reflected in the findings of the current research. For example some participants had an emotional response to DCM feedback, perceiving it as critical and threatening to their self-perception of being competent carers. However in contrast, DCM also expanded the participants' care-giving repertoire, enhancing their beliefs in their own capacities.

Robertson (1999) described how psychological theories such as self-efficacy (Bandura, 1986) and loss (Worden, 2001), as well as organizational models of change, can be utilized to describe and explain the behaviour, attitudes and beliefs of healthcare professionals with regards to change. Indeed, some of these ideas are also apparent in the current findings. DCM leading to increased self-efficacy was a factor that contributed to sustaining learning. In addition, the participants' capacity to accept DCM and learn from it was mediated in part by their working culture and context

(Harrison, 1972; cited in Robertson, 1999). Finally, Robertson (1999) emphasized the importance of identifying and defining any problems or obstacles impeding change before rushing towards a solution. Considering the outcome of the current study where the core category was conflict, perhaps this latter point needs to be considered when implementing future DCM mapping exercises.

It has been shown that reactions to, and perceptions of DCM were subject to change. They had the potential to become more positive and productive in light of continuous evaluations; this is reflected in the DCM research findings of Brooker *et al.* (1998), and the studies conducted by Martin and Younger. Furthermore, the current research revealed some implicit learning processes that contributed to the success of DCM as a learning tool to aid staff development. The current findings demonstrated that DCM has been shown to be beneficial for the professional development of nursing staff because it represents aspects of modeling, reinforcement, repetition and trial and error. According to traditional learning theory, these factors are necessary for affecting and maintaining changes in behaviour and are in keeping with traditional learning theory principles such as operant conditioning and social learning theory (Pervin & John, 2001). In addition, the findings of Lintern *et al.* (2000a & 2000b) reflected the value of the reinforcement potential of DCM.

4.1.4 Barriers to staff development and change: role conflict

Some of the DCM literature suggests that a change in culture of care occurred, evidenced by increased well-being values (WIB values). This claim prompted one of the aims of the current study: to investigate any long-term changes in culture of care that may have occurred as a result of DCM. The participants described DCM

observations fostering unnatural reactions indicative of the Hawthorne Effect. While it is acknowledged above that this can be useful, these behaviours were not often sustained after the mappers had gone. This factor, coupled with the internal and external barriers to change described above, would seem to indicate that staff development leading to change in care culture is a more complex issue and perhaps one that cannot be wholly encapsulated through increased WIB values. The findings of the current research have illuminated a dichotomy between the individual carers and the expectations of the organization. This dichotomy seemed to lead to the carers experiencing role ambiguity and role conflict within their occupation. Indeed, these issues are acknowledged in both the DCM, and mainstream literature of care of the elderly (Barber & Iwai, 1996; Ford, 2001; Neel, 2002; Packer, 1996).

From the current interviews with nursing staff, DCM provided a framework for empathic, person-centred care with an emphasis on reflection and the importance of simply 'being' with the patient. In many cases this was congruent with participants' own value systems, and thus representative of a type of common sense caring. However, despite this, there were admissions that aspects of caring concerning patients' well-being were difficult to implement because they were not prioritized in the wider organizational context of being a nurse carer in the NHS. Furthermore, striking a balance between physical and psychosocial aspects of care represented a challenge. This dichotomy was summed up by Neel's (2002) observation that DCM means individuals are competing under the pressure of two value systems. In the final analysis the 'doing' part of the carer's role, focused on physical care encounters and ward tasks, seem to be take precedence. In the present study, one participant equated social contact with providing sensitive physical care, and expressed disappointment

that the mappers were not privy to this. In addition, several suggested it would preferable if the mappers actually undertook some physical tasks rather than just observing.

The researcher noted that despite participants' internalizing aspects of DCM, and the growing culture of incorporating person-centred care within the nursing role (Burgess, Page & Hardman, 2003; Dewing, 2004), as shown above, role ambivalence, conflict and a continued emphasis on 'doing' were still evident. Perhaps 'doing' represented something more familiar, structured and tangible, or as Fiona suggested, a way for carers to take a psychological break from the difficulties of caring for the individual with dementia.

Considering such issues, along with organizational restrictions, it is hardly surprising that DCM, with its emphasis on reflection, detailed observation, empathy and being with the patient, could be regarded as a further source of conflict in terms of the carer's role. Perhaps encouraging too much empathy with the patient is damaging to the carer because it involves breaking down potentially necessary defences against anxiety that are actually required to maintain job satisfaction, and manage conflict. The notion of work environments being psychologically harmful and staff defending against this, is reflected in the classic study of Menzies-Lyth (1959) and conceptualized in more recent psychodynamic literature (Obholzer & Zagier Roberts, 2000). In addition, Walsh (1996) acknowledged the experience of powerful positive and negative emotional reactions in response to work. Such responses were evident in the current findings relating to the carer's role and the impact of DCM (see Main Category: Responses, p. 81-88).

4.2 Critique and limitations

When interpreting the findings of the current study, its methodological limitations should be considered. It is recognised that individuals who volunteer to be involved in research studies, including qualitative studies, may not be representative of normal populations (Parker, 1994). This factor, along with the small sample size raises issues for generalising the results. The majority of the participants were from Units 1 and 3, which were located within the same NHS Trust. Selecting participants from another Trust may have provided a more varied response. Reasons why this failed are presented in the Critical Appraisal. In addition, all the participants described their ethnicity as White British, therefore representing a homogenous sample, meaning the results lacked the perspectives of other cultures with regards to the impact of DCM. Future generality of these results will depend on further qualitative, quantitative and possible longitudinal studies in to the impact of DCM being undertaken.

Although the original aim was to interview individuals who had just experienced a map, serendipitous events and theoretical sampling led to interviewing individuals who had also been mappers. In terms of theory building and actual category development, the experiences of the mappers did not differ greatly from those individuals who had been mapped. To the mappers, DCM was still a learning process that provoked a (sometimes more intense) response and produced learning consequences. However, combining these two experiences, along with interviewing individuals at different levels of nursing, perhaps added a layer of complexity to this research when considering the issue of saturation and, the viability of the results in terms of the experience of the mappers.

4.3 Clinical implications

While DCM appears to have had an impact at several levels, in the case of the current research, the impact had not been fully nurtured due to inconsistent feedback. The findings also demonstrated a lack of opportunities to help nursing staff (both mappers and those who had mapped) integrate the DCM experience positively and constructively. This needs to be considered in any future implementation and could perhaps be addressed with the use of individuals integrated within the ward environment, who have the capacity to initiate and sustain change, as well as a psychologically informed supervisory process encompassing regular feedback 'clinics.' These considerations are important in light of the current research, which has shown DCM is best used as an ongoing process in order to reduce anxiety, offer continual reinforcement and provide feedback to staff members, strengthening behavioural changes that improve care. If this occurs on a consistent basis, DCM has the potential to change the culture of care from the traditional medical model to more psycho-social forms of care.

In order to sustain the utility and longevity of DCM, the use of individuals committed to change who are representative of a reliable authority, integrated within the ward environment, and familiar to staff, would seem necessary. To enhance the safety of DCM for staff, these individuals would ideally have had similar DCM experiences and learnt from them. In this way, they can normalize the anxiety provoking nature of the tool, but also reinforce the positive aspects that reduce conflict. Individuals committed to change can also instigate a collaborative process between all staff in terms of preparation for a map. Preparation would involve

identifying and defining problems or obstacles, such as aspects of conflict, which may prevent change, before continuing with the mapping exercise (Robertson, 1999).

With only two articles on how to provide effective feedback (Mackenzie, James & Lee, 2002; Müller-Hergl, 2004), the issue of giving informative feedback has largely been ignored in the DCM literature. Furthermore, the researcher was surprised that this subject was not given more coverage at a DCM basic users course, and in the course handbook. Feedback needs to be consistent, sensitive and available to everyone fairly soon after the map has finished. Perhaps regular feedback clinics in the aftermath of a map, informed by the principles suggested by Mackenzie *et al.* (2000) and Müller-Hergl (2004), as well as an empathic appreciation of the carer's role and the stresses of the environment, would help improve this aspect of DCM.

The notion of supervision is a traditional component in both clinical psychology and nursing. It provides a forum for discussion and reflective practice. Insight into one's own practice may be gained, thus helping the individual to develop. These principals are in keeping with the aims of DCM and the current findings demonstrated aspects of development and reflective practice. In light of this, when considering DCM implementation it maybe advantageous to include a psychologically informed support/supervisory process aimed at individuals and small groups. This could involve those integrated agents of change mentioned above and include peer support and within-nursing supervision. DCM-related supervision could help the carer explore their role, the challenges inherent to the role and the learning consequences of developmental tools like DCM that impact on the role, including dealing with any aspects of conflict that may arise. Psychological strategies could also be employed to

aid this process. These may include cognitive reappraisal of feedback and encouraging enhanced self-awareness through acknowledging hidden feelings of conflict. Reducing conflict and threat would seem important considering that this represents a barrier to change.

Clinical psychologists are often involved in staff training and development at a consultancy level. The current research has revealed the value of role-play and anecdotal imagery being incorporated into learning procedures. Unqualified staff could also benefit from learning about the value of therapeutic techniques (i.e. sensory interventions) for individuals in the later stages of dementia. Taken together, regular DCM feedback clinics and supervision sessions could potentially reduce aspects of conflict through enhancing trust and communication between staff. Increased opportunities would be provided for carers to learn from each other through modeling and sharing ideas and feelings. Staff could also observe each other and then provide feedback in a less informal manner than a DCM evaluation. This may desensitize any apprehension felt about having their work observed by mappers.

4.4 Implications for future research

Several areas for future research emerge from the current findings. Firstly, it would seem pertinent to address the learning and support needs of both qualified and unqualified nursing staff working with individuals with dementia. It may also be useful for staff to become mappers as part of their professional development. In addition to this, and in light of the role conflict issues, research specifically considering and identifying the role of nursing assistants working in this field would seem important.

Future research may include a greater concentration on the experience of those who have been mappers. This would substantiate the present results and ensure saturation in terms of the impact of DCM for these individuals. Further research into effective implementation of the tool to enhance staff development is also required. This could include addressing issues of conflict, feedback procedures and identification of obstacles that may arise as DCM is implemented. At present this information is not comparable to the DCM literature addressing reliability and validity, but is just as important.

4.5 The researcher's view of DCM

After conducting this research, the position of the researcher towards DCM has altered somewhat from one of impartiality, to feeling that if this tool is used properly it can make a difference to care practice at both a micro (e.g. within the participants) and macro (e.g. within the organization) level. It was really interesting and enlightening hearing the participants describe how they had used and subsequently grown in light of DCM. In addition, the researcher was especially encouraged by the reinforcing potential of DCM, as well as the fact that it provided a framework within which nursing staff could structure the care they provide. Since conducting the literature review and subsequent research report, the researcher has become more positive about the use of DCM to aid practice development and has undertaken some teaching sessions on the subject to introduce nursing staff to the benefits of DCM. The results of the current research, including the aspects of DCM that reduce and induce conflict, have informed these sessions and the researcher has encouraged staff to seek regular and detailed support and feedback to help them integrate the DCM experience. Likewise, the researcher has learnt that it is important for the mappers to

be aware that those being mapped need feedback and support, which is balanced and constructive so that defenses and conflict may be reduced.

As a tool for research, audit and outcome measuring, it seems that the benefits of DCM presented in light of the current research (e.g. reinforcing for staff) are such that it does have place, especially when considering research investigating and enhancing practice development within NHS Trusts. The current review of the literature suggests that more work needs to be done to ensure the reliability and validity of DCM. However, in its present form, it would appear that DCM and the feedback and data generated from it could be used most effectively within wards and on a relatively small scale to help staff reflect on and improve their care practice. It is interesting to note that this was actually the original purpose behind DCM.

4.6 Conclusion

The current study followed a qualitative research design and the results were informed by the experience and identity of being a nurse care provider for individuals with dementia within the NHS. The findings suggested that implementation of DCM had diverse consequences, generating learning and highlighting potential situations that both induced and reduced conflict for carers' roles. Findings emphasized that internal factors related to the individual, and external, organizational features often affect the impact of such developmental tools. The research provided an insight for clinicians working in the field of dementia care who are involved in the training, development and support of nursing staff. Providing staff with the attention and support that parallels the care they give to their patients has the potential to enhance their role, and increase their feelings of worth and professional validation within the

system. The findings of the current study demonstrated the ability of DCM to contribute to this if it is facilitated appropriately, involving all staff and employing the psychological principles of empathy, collaboration and supervision to address issues of conflict. With these in mind, the following recommendations are made for the future use of DCM:

- For it to be of real benefit, DCM needs to be a continuous, repeated process.
- DCM implementation should include support/supervision provision for nursing staff.
- The supervisory process could be psychologically informed and include both peer and within-nursing supervision. This process would help nursing staff explore the DCM experience and the impact it has had on their role, as well as any aspects of conflict that may arise.
- Implementation could be facilitated with the use of individuals who are trained in the DCM method, integrated into a ward environment and have had experience of being mapped themselves.
- Regular feedback clinics to ensure and enhance the reinforcing potential of DCM and reduce the anxiety associated with its use.

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Section 3

Critical Appraisal

1.0 Introduction

The critical appraisal is based on a research diary maintained by the current researcher throughout the research process and reflections apparent on completion.

2.0 Planning the research

I became interested in the area of older adults and dementia care whilst studying for my undergraduate Psychology degree and after working in a nursing home during the holidays. It was this latter experience that provided me with a glimpse of inadequate care that I felt was not person-centred. This prompted me to read up on the interface between psychology and dementia, where I first came across the subject of dementia care mapping (DCM) and literature on person-centred care. As part of the clinical course requirements, it was necessary to complete a literature review and, as the subject of this work, I decided to concentrate on the area of DCM. The idea for the research arose from this literature review, as well as my own experiences of working with nursing staff who cared for people with dementia.

I felt that DCM was grounded in psychological principles, indeed it has been described as a ‘psychological tool’ (Beavis, Simpson & Graham, 2002). I was interested as to whether nursing staff could actually relate to these principles and use them effectively. In the preliminary stages of planning, I attended a DCM basic user’s course and the first DCM conference. I was aware that the research presented at the conference was focused on issues of practical application of DCM within NHS trusts, as well as issues of reliability and validity and a concentration on trying to understand the experience of dementia from the individual’s perspective. Although these issues all have individual merit and are reflected in the literature, I felt that the experience of

staff regarding DCM was missing. This confirmed my final decision to explore the impact of DCM on nursing staff.

3.0 Choosing qualitative research

In terms of choosing a methodology, I started with the research question (Silverman, 2000) and it was decided that a qualitative approach was the most appropriate. At this stage I did not have a preference for either methodology, however, in terms of writing up and presenting pieces of academic work, I was more familiar with using quantitative methods. I welcomed (with just a little apprehension!) the opportunity to learn more about qualitative strategies.

I reviewed different qualitative approaches and originally considered either grounded theory or interpretive phenomenological analysis (IPA). Grounded theory was a pragmatic choice as the research and supervisory experiences within the department was stronger in this method. Furthermore, I appreciated the conceptual and theory-building aspects of grounded theory, as well the opportunity to make one interpretation out of many meanings.

4.0 Epistemological stance of the researcher

Madill, Jordan and Shirley (2000, p. 2) asserted; “qualitative research is not a homogenous field. There are a number of epistemological positions within which the qualitative researcher can work and many different methods of analysis.” These are broadly identified as realist (naïve, scientific, or critical), contextual constructionist and radical constructionist.

I feel very much on a learning curve in terms of the epistemological debate within qualitative research, and my own position with regards to this. This learning curve will probably continue past the submission date of this study, into my research career as a clinical psychologist. Madill *et al.* (2000) suggest some congruence between critical realist and contextual constructionist approaches. This similarity pertains to contextualism adopting the critical realist method of grounding any findings in the data and advocating that within social practices, fundamental meaning and organisation can be determined (Parker, 1996; cited in Madill *et al.*, 2000). In line with the method advocated by Charmaz (2003), I attempted to acknowledge both the participants' own understandings and the context of these understandings, always grounding analysis in the data. Furthermore, I checked my own subjective interpretations through the process of reflexivity (see Section 9.0). Taken together these suggest a flavour of critical realism, as well as an acknowledgement of contextual constructionist ideas.

5.0 Conducting the research

Conducting the research began by gaining ethical approval. This was a novel experience for me and felt like conducting a research project in itself! Reflecting back, I found it interesting that at this stage I did not approach any clinicians, or major stakeholders to gain field supervision. This may have arisen due to a need to be self-reliant during an uncertain time. I certainly felt a tension between involving people at the early planning stage of the research and being unaware of the time required to gain permission to begin the study. In this sense I was unable to offer others or myself certainties and clear answers, which may have also contributed to my reluctance to involve them. In hindsight, however, it may have been useful to gain the support and perspective of other individuals in the field, who also had familiarity with DCM.

Several methods were used to recruit participants. Firstly, I advertised through Regional DCM Network Meetings. Unfortunately, due to work commitments, I was unable to attend the meetings myself but prepared a statement (similar to the content of the participant information sheet) that was read out. This was in part successful and some clinicians working in the area of older adults who had secured funding for a DCM project contacted me, feeling that my research would complement the implementation process. This was a very exciting and encouraging start however unfortunately it did not proceed as there was no secure, confirmed timescale for this mapping project. This assurance was crucial if I was to meet the deadline for handing in the research. On reflection, this incident perhaps also contributed to my preference for undertaking the project on my own and not being reliant on anyone. Under the circumstances, self-sufficiency seemed the safest option!

Other attempts at securing participants included gaining ethical approval to undertake interviews within another NHS Trust. Although it was not originally anticipated that this would be a multi-centred study, as time went on it seemed that interviewing people in a different NHS Trust would contribute towards the results. I had a contact (a Specialist Dementia Care Advisor) within this Trust who offered to attempt to recruit participants in the appropriate forums (such as ward meetings). In order to introduce myself and explain the research, I suggested that I attend the meetings personally as this had proved successful when recruiting participants from Unit 1. However, my contact preferred to mediate recruitment herself.

A time was set and a room booked for the interviews to take place, however, despite various attempts at recruiting, no participants came forward. In light of the

results of my study, the lack of participants is interesting to ponder. From this experience I have learnt that it is possibly more effective to introduce oneself directly to potential participants. This perhaps negates any preconceptions or fears that these individuals may have about the research and potentially initiates important connections between the researcher and the participants that are necessary for the sharing of experience to take place.

Continuing on the theme of rapport, it is indicated in the Method - Section 2.4.2 that it felt important to share my own experiences with the participants, as well as stress my impartiality to DCM. I felt both these strategies were necessary in order to gain trust and an honest response. At the start of this research, my impartiality to DCM was sincere and I was genuinely interested to learn more about it from the participants' perspective. However, at the close of the research, I, like the participants have developed an ambivalent stance with regards to DCM; I feel it could be a very useful tool if it is implemented appropriately and more thought is given to the needs of the staff.

There were some factors that made the research process more manageable. The first was making sure that I had spares of everything such as batteries and tapes. Furthermore, I had been warned about the importance of an interruption, and noise free environment for the interviews to take place. I was fortunate to have this on Units 1 and 3. On Unit 1 the ward manager was very co-operative and helpful, suggesting a specific time, just before shift change over occurred, for the interviews to take place, meaning there was enough staff to cover the ward, the interviews were not rushed and the participants did not feel under pressure to get back to work. This contrasted with

Fiona's interview, which was interrupted several times, and therefore more stressful to carry out. These conditions served to highlight important contextual factors, such as the stress of the working environment, however I was glad this was not a consistent feature of other interviews.

Reflecting back, I enjoyed the interviewing process and I felt my interviewing style became more fluid and confident as the interviews progressed. Despite this however, at the close of each interview, I always felt anxious that I had not gained enough information. This was perhaps a consequence of the length of time it took for the categories and processes to emerge from the data. Charmaz (2003) recommends that the researcher transcribes the material themselves in order to aid this procedure. Although it is indicated in the Method - Section 2.4.3 that a secretary transcribed the interviews, I did attempt to transcribe the first interview myself, however, it proved too time consuming to be of benefit. In addition, I found myself stopping transcribing to listen to the tape and make notes. At this stage I felt I could use the time it would have taken to transcribe more constructively and thus elicited the help of the secretary. As this was a change to my original plan, I was mindful to contact the participants and ask their permission; fortunately all gave their consent.

Striking a balance between undertaking the research and simultaneous clinical work was challenging. At times, the need to immerse myself in the data conflicted with my clinical work and I had to learn to compartmentalise things. It seems however, that this is a necessary skill for anyone undertaking a career in clinical psychology within the NHS.

Working towards a doctorate was a substantial motivator that drove me forward. However, there were also times when my enthusiasm and confidence waned. At such times it was necessary to seek the support of my academic supervisor, family and peers, who were having similar experiences. Taken together, these sources of encouragement were invaluable and succeeded in reducing the isolation I felt. Through supervision I was able to comprehend that the area of DCM and the terminology associated with it, could be confusing for someone unfamiliar with DCM or who had not been involved in the process. To these ends I decided to provide a glossary to explain some of the concepts (Appendix 1).

6.0 Analysis and writing up

The procedure of analysis was interesting at many levels. I was surprised at the anxiety I experienced as I waited for theories and processes to emerge from the data and indeed, how many drafts later this actually occurred. At first I really enjoyed the line-by-line coding and was positive about having made a start. At this stage, perhaps due to the initial excitement of beginning the analysis, I had to check my tendency to place any abstract analysis on the data. I attempted to counter this by recording my thoughts in the research diary.

Whilst waiting for my findings to emerge, my own lack of delayed gratification was an issue that I struggled with. Indeed, when the work did eventually start forming a coherent structure, I was surprised to find that writing the report involved considerable re-analysis of the data and thus the first draft of the results (as well as my nerves!) had to be suspended whilst this took place.

As writing commenced I was aware of the importance of verifying the emerging theory and categories with peers and colleagues working in the field. I am currently on placement at a location that is considering implementing DCM. The findings of this research, especially the use of the supervisory process, will be considered in this implementation.

I feel it is ethical that research should have some practical application and intend to publish the current study in peer reviewed and academic journals, as well as presenting the findings at relevant conferences. I have informally discussed the emerging theory with clinicians working in the field of dementia care. The issue of conflict representing a barrier to change was very real to them and they welcomed an acknowledgment of this in terms of implementing frameworks such as DCM to aid staff development.

Other challenges included the change of format that was introduced by the Doctorate in Clinical Psychology course, which substantially reduced word limit in terms of the final write-up, especially as all quotations used had to be included within the word limit. The current cohort was the first to undertake this new format and, in many ways the transition was not an easy one because we could not learn from the examples and experiences of other cohorts (i.e. report structure, use of quotations). Due to the fact the new format was a first, inevitably the lack of experience using it, meant there was sometimes a dearth of clear, precise and consistent information in terms of structure and format which only served to fuel existing anxieties. In addition, for my own comprehension, it was necessary to explore and write the results in their full capacity, which far exceeded the word limit. Although reducing the

original draft and collapsing categories was testing (and I felt a sense of loss as word after word was deleted!), I acknowledge that this will perhaps make the preparation for publishing this work an easier and less daunting task.

7.0 Saturation

The interviews produced a total of 19 categories. Saturation is the point where the data stops producing any significant new material for analysis (Strauss & Corbin, 1998). In the case of the individuals who had been mapped, later interviews did not produce any new categories and it was felt that saturation had been reached. Although the interviews with the mappers did produce some new categories, these were associated with the other core and main categories (e.g. conflict of caring for someone with dementia). Despite this however, more interviews would need to be conducted with individuals that had been mappers to confirm saturation for this group.

8.0 Enhancing rigour and validity

As the volume of published qualitative research studies increases, so do guidelines on enhancing its rigour (Barbour, 2001; Barbour & Barbour, 2003; Elliot, Fischer & Rennie, 1999; Greenhalgh & Taylor, 1997; Silverman, 2000). One consistent feature of these guidelines encompasses credibility checks. Multiple coding takes place to ensure that the emerging analyses make sense to other individuals who have knowledge of the field under study, or who maybe able to offer fresh perspectives, thus accounting for contrary cases (Elliot *et al.*, 1999; Silverman, 2000).

To facilitate such checks, a coding group was formed, comprising other trainee clinical psychologists and a facilitator, who had published several articles using grounded theory methodology. The group coded each others' transcripts and identified the main themes that were emerging. On comparing my analysis with that

of others, I was satisfied that I was not imposing my own constructs on the data. Barbour (2001) stated that the value of multiple coding lies in its capacity to bring alternative interpretations to the data. Whilst the views of others were similar to my own, they also illuminated my analysis by identifying processes of perception (such as perception of self as a learner) of which I had previously been unaware.

In many cases, validity in grounded theory is sought by seeking respondent validation with regards to the relevance of the emerging categories. Although I did consider seeking respondent validation, I decided not to pursue this avenue for ethical reasons and the fact that it would have placed considerable demands on the participants' time (Barbour, 2001). In addition, Mays and Pope (2000) warned that seeking respondent validation can lead to too many individual and discrepant accounts, when the purpose of analysis is to provide an overview of the data.

Silverman (2003) provided several ways of thinking critically about the data analysis including: the constant comparative method; negative case analysis; and the presentation of a theoretical rationale behind the categories, all of which are analytic commitments of grounded theory. Every attempt was made to adhere to these principles throughout the analysis of data.

9.0 Reflexivity

Although qualitative methods are open to criticism due to the interpretive role played by the researcher (Greenhalgh & Taylor, 1997; Hall & Callery, 2001), this role is acknowledged through the process of reflexivity, where the experiences of both participant and researcher are a fundamental part of the research process (Elliot *et al.*,

1999; King, 1996). In this case, a research journal was used throughout for the purposes of reflexivity.

My position is that of a white, British, middle class, trainee clinical psychologist. Through the experiences of working, firstly as a nursing assistant and then as a trainee clinical psychologist sometimes, in a consultancy role, I have developed somewhat ambivalent preconceptions with regards to nursing staff and their older adult client group. These included feeling that there was a lack of staff training and an awareness of staff limitations and unhelpful behaviour towards the client group. However, I was also able to understand the frustrations these individuals were facing, that seemed to be compounded by poor financial reward and a lack of appreciation of the work that was carried out. It appeared that staff did not value themselves sufficiently and this had consequences for the patients.

To inform the research process and increase understanding, I also undertook a basic DCM course. Although I have done some mapping, this was not with the participants who were interviewed, and they were unaware that I had had this experience. Despite undertaking the course, I was genuinely impartial to DCM (see Section 5.0). However, I did feel strongly about the lack of person-centred care I had witnessed over the years. Although the core category of conflict did seem to reflect the experience of the participants, it should be acknowledged that it may have also indicated my own sense of conflict about my experiences of working with older adults with dementia.

I am developing an interest in cognitive analytic therapy (CAT) approaches which lays emphasis on patterns of behaviour developed in the past that have consequences in current relational and reciprocal role interaction (Ryle & Kerr, 2002). This was used to inform the research in several ways. Firstly it consolidated my awareness of the interview context and situation and the relational roles that were potentially enacted between myself, as a researcher and trainee clinical psychologist, and the participants as members of the nursing profession (e.g. issues of power and trust). Furthermore, it elucidated the reciprocity shared between the caregiver and the patient. Finally, CAT perspectives informed my analysis of the interview data by accounting for what is explicitly said and implicitly meant. This is congruent with the grounded theory approach that encourages the researcher to “dig into implicit, unstated and condensed meanings” (Charmaz, 2003, p.103). In addition, Hall and Callery (2001) advocated the use of reflexivity and relationality in providing criteria for rigor within grounded theory studies.

In terms of all of the above and throughout the analysis, I was cognisant to be aware of, but put aside personal material in favour of the participants’ views and feelings related to the DCM experience.

10.0 Learning points

As a result of undertaking this project I have gained confidence in respect to completing a short and clinically relevant piece of research. In addition, I have developed and enhanced skills that will be relevant in my future career as a clinical psychologist. I also believe I:

- Have developed practical skills such as submitting a successful proposal both to a University research panel and the local Research and Ethics Committee. In addition, writing the report and literature review has improved my ability to critically appraise both my own work, and that of others.
- Have gained a deeper understanding of qualitative methodologies, conducting interviews and analysing the data using grounded theory. From the knowledge gained, I feel I would be able to use this method again with greater ease.
- Have achieved a greater comprehension of literature pertaining to both DCM and person-centred care.
- Am more cognisant of the experiences of my participants and the contexts in which they work. This will inform any future role I have providing consultancy and training to nursing and care staff.
- Have a greater conception of the factors that enhance successful research. These include using a personal approach where possible when recruiting participants, having blocks of time, being motivated, committed and organised, especially as every stage takes longer than predicted.

The list is by no means saturated and I hope it will continue to expand in terms of future research ventures.

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Appendices

Appendix 1. Glossary of terminology related to DCM

Glossary of terms (all taken from Bradford Dementia Group, 1997):

Term	Abbreviation	Description
Behaviour category code	BCC	This is the label given to describe one of the 24 different domains of participant behaviour that have occurred. The BCC is recorded at the end of the time-frame. A full list of the BCC's is presented below.
Ill being value	WIB value	This is the recording made, based on the behavioural indicators, about the relative state of ill-being experienced by the person with dementia. It is recorded as a well-being value. The six-point well/ill being scale is described below.
Observer	Not applicable	The observer is the mapper.
Participants	Not applicable	The individuals with dementia who are being mapped. These are shown below.
Personal detractions	PD's	Events that undermine the individual with dementia. These are aspects of malignant social psychology (MSP).
Positive events	PE's	Events that enhance the individual with dementia.
Representative time period	Not applicable	The total amount of time that the mapping exercise takes place (i.e. six hours).
Time-frame	Not applicable	The five-minute observation period after which the recordings are made.
Type 1 behavioural category code	Not applicable	Behaviour category codes that are more active and have a high potential for well-being.
Type 2 behavioural category code	Not applicable	Behaviour category codes that are less active have low potential for well-being.
Well-being value	WIB value	This is the recording made, based on the behavioural indicators, about the relative state of well-being experienced by the person with dementia. It is recorded as a well-being value. The six-point well/ill being scale is described below.

The data generated by DCM:

Data	Description
Individual well/ill being scores	This shows how an individual participant fared on average during the observation period. The main use of the individual WIB scores in feedback is to compare how different participants fared.
Group well/ill being scores	This shows how all the participants fared, on average, during the observation period. For feedback, it provides a single figure that summarises the participant's overall well-being.
Individual well/ill being value profiles (WIB value profile)	This indicates how a participant fared during the observation period, by showing the proportion of time spent in each of the six bands of the well-being and ill-being scale. The WIB value profile is less highly condensed than the individual WIB score. It gives more detailed information on the pattern of well-being, which can be valuable in feedback.
Group well/ill being value profiles	This indicates how all the participants fared during the observation period, by showing the proportion of time spent in each of the six bands of the well-being and ill-being scale. This is particularly useful in feedback, because it shows the overall pattern of well-being and ill-being in the care setting, and points to ways in which the care can be improved.
Individual behaviour profiles	This provides an overall picture of the way a participant spent time during the observation period. For feedback purposes, it helps to show how far a person's occupational needs are, or are not, being met. It is also possible to work out the average WIB values for the main categories that feature in the profile, and hence get a sense of the well-being or ill-being associated with each behaviour.
Group behaviour profiles	This provides a picture of the way all the participants who were observed spent their time during the observation period. It shows the occupational strengths and weaknesses in the care environment by giving clear evidence of: the behaviour categories that were and were not used, particular activities in which participants

	were and were not involved. This is particularly valuable in forming an improvement plan as a result of feedback.
Dementia care index (DCI)	This provides, in a single number, a piece of highly condensed information about the quality of care. The DCI brings together data from the WIB values and from the range of behaviour categories. Considering the range of behaviour categories is a simple way of assessing the extent to which occupational needs are being addressed. The DCI is primarily a means for setting goals in a care environment.

Scale of well-being and ill-being:

WIB value	Description
+ 5	Exceptional well-being – it is hard to envisage anything better; very high levels of engagement, self-expression, social interaction
+ 3	Considerable signs of well-being; for example engagement, interaction or initiation of social contact
+ 1	Coping adequately with present situation; some contact with others; no signs of ill-being observable
- 1	Slight ill-being visible; for example boredom, restlessness or frustration
- 3	Considerable ill-being; for example sadness, fear or sustained anger; moving deeper into apathy and withdrawal
- 5	Extremes of apathy, withdrawal, rage, grief or despair

Behaviour category coding:

Code memory	Cue	General description of category
A	Articulation	Interacting with others, verbally or otherwise (with no other obvious activity)
B	Borderline	Being socially involved, but passively
C	Cool	Being socially uninvolved, withdrawn
D	Distress	Unattended distress
E	Expression	Engaging in an expressive or creative activity
F	Food	Eating, drinking
G	Games	Participating in a game
H	Handicraft	Participating in craft activity
I	Intellectual	Activity prioritising the use of intellectual abilities
J	Joints	Participating in exercise or physical sports
K	Kum and go	Independent walking, standing or wheelchair-moving
L	Labour	Performing work or work-like activity
M	Media	Engaging with media
N	Nod, land of	Sleeping, dozing
O	Own care	Independently engaging in self-care
P	Physical care	Receiving practical, physical or personal care
R	Religion	Participating in religious activity
S	Sex	Activity related to explicit sexual expression
T	Timalation	Direct engagement of the senses
U	Unresponded to	Communicating without receiving a response
W	Withstanding	Repetitive self-stimulation
X	X-cretion	Episodes related to excretion
Y	Yourself	Talking to oneself, or an imaginary person
Z	Zero option	Behaviours that fit no existing category

Appendix 2. Letter of ethical approval

Research & Development Office
Daisy Peake Building
Towers Hospital
Gypsy Lane
Leicester
Tel: 0116-225-3743
Fax: 0116-246-3591
David.Clarke@leicspart.nhs.uk

DC/LN/04-q2502-43/ELMH0321

17 August 2004

Miss Lindy Newton
Trainee Clinical Psychologist
Leicestershire Partnership NHS Trust
C/o Department of Clinical Psychology
104 Regent Road
Leicester LE1 7LT

Dear Lindy

Re: The Impact of Dementia Care Mapping on Nurses

Please find enclosed a copy of correspondence from the Leicestershire Local Research Ethics Committee (Committee (One)), confirming that following the submission of your amended documentation the project has received formal ethical approval.

Under the Research Governance Policy of the Trust, confirmation of appropriate ethical approval is a necessary prerequisite for obtaining Trust Management Approval. I am happy to confirm therefore that Leicestershire Partnership NHS Trust formally approves the study to proceed, subject to the following conditions:

- You abide by the conditions imposed by the REC
- All correspondence with the REC is routed through the Trust Research Office (including the obligatory progress/final report as detailed).
- The agreed protocol is adhered to.
- A summary of any findings is reported to the Trust/Clinical Service/Participants at the conclusion of the study.
- Any changes in the protocol, timescale etc. are notified to the R&D Office
- At the conclusion of the study, a final report form is completed.
- A copy of any subsequent publication is lodged with the Trust.
- That paperwork related to the study may be subject to audit at any time (this requires maintenance of a site file).

This letter also serves as confirmation that as Principal Investigator you are covered by the terms of the Trust's research indemnity for the duration of the project. This project will be considered as within the remit of the Trust's Research Programme on Elderly Mental Health.

Please sign and return the attached confirmation. With best wishes on the success of your study.

Regards,



Dr. Dave Clarke
[R&D Manager]

Appendix 3. Participant information sheet

PARTICIPANT INFORMATION SHEET

STUDY TITLE: THE IMPACT OF DEMENTIA CARE MAPPING ON NURSES

You are being invited to take part in a research study. Before you decide whether or not to participate, it is important for you to know why the research is being done and what it will involve. Please read the following information carefully and discuss it with others if you wish. Take time to decide whether or not you would like to participate, when you have made a decision complete the answer slip below.

Thank you for reading this.

What is the purpose of this study?

Dementia Care Mapping (DCM) is an observational tool designed to evaluate the quality of care and well-being of people who have dementia in formal care settings. The research on the reliability and validity of DCM is increasing however, there seems to be a lack of information about the impact, effect or influence this tool has on nurses who are observed during the mapping process. This subject is important considering that it is these individuals who receive the feedback from a DCM evaluation and subsequently implement any changes that may be required. The issue of the effects of DCM on staff has been raised as an important one from both a practical and subjective perspective. Similarly, it is documented that the acceptance of DCM at a staff and organisational level is a vital component of the success of the tool, however, to date this issue of impact has had little academic focus.

Why have I been chosen?

You, along with eight or nine others, have been chosen to take part in this study because, as nurses caring for those who have dementia, you are observed and receive feedback during the DCM exercise. You are also responsible for implementing any changes that may occur as a result of the map.

Do I have to take part?

Participation in this research is entirely voluntary.

If you do decide to take part you will be given this information sheet to keep and asked to sign a consent form. If you decide to take part, you would still have the freedom to withdraw at any time without giving a reason. A decision to withdraw, or not to take part, will not affect the conditions of your employment.

What will my role be?

It is envisaged that the research will be conducted over the course of a year. During this time the researcher will interview you once about how the mapping exercise and feedback affected you (i.e.

the impact it had on you). The interviews will be approximately one hour long and can take place during your work time or whenever it is convenient for you. The interview will involve the use of flexible open-ended questions and will be taped, transcribed and analysed using a qualitative research method called Grounded Theory. Due to the nature of this method the researcher may contact you again to ask your opinion on emerging themes and concepts that arise as a result of the interviews. The reason for this is to validate the research by asking participants to comment on the interpretations that the researcher makes. If this does occur, the researcher will contact you during working hours.

What are the possible disadvantages and risks of taking part?

There are no intentional risks or disadvantages to being involved in this study and no more than an hour of your time is needed for the interview.

What are the benefits of taking part?

The main benefit is the fact that it is your chance to express how you feel about the process of DCM.

Limitations of the study

It is hoped that this research will provide a sound base for further exploration into this topic in the future. However, it should be acknowledged that, due to the small sample size, the findings of this research are not necessarily applicable to any similar sample group.

Will my taking part in this study be kept confidential?

All data collected will be kept strictly confidential. Although the information from the interviews will be taped and transcribed, participants will be given alternative identifiers and no names, addresses or other information that identifies individuals will be held on computer or included in any report of the research. Any data stored on a computer will be password protected and transcriptions of the data, made for the purposes of analyses, will be kept in a locked cabinet. Analysis of the transcripts will be carried out at the home of the principal researcher.

What will happen to the results of the research study?

Firstly, the results will be written up by the investigator as part of her doctorate thesis and may be published in academic or practice journals. The researcher hopes to present the findings at a local level to those involved in the research and at national conferences. The University of Leicester library will contain copies of the raw data until six years after the completion of the research however open access to these will not be available in order to protect confidentiality.

Who is funding this research?

The University of Leicester is funding this research.

Who has reviewed this study?

Scientific review has been undertaken by an independent member of staff from the Department of Clinical Psychology at the University of Leicester.

Who to contact for further information?

If you have any questions, please feel free to contact the principal researcher, Lindy Newton at the Department of Clinical Psychology, University of Leicester, 104, Regent Road, Leicester, LE1 7LT, or by email on Len1@Le.ac.uk, or telephone on 0116 223 1643.

Please complete the reply slip below

I would like/ would not like to take part in this research into the impact of Dementia Care Mapping on nurses.

Name (please print).....

Signature (please sign).....

Date.....

Appendix 4. Participant confirmation letter

2nd November, 2004.

Dear Participant,

Thank you once again for volunteering to be interviewed for this research. This letter is to confirm that the interview will take place on (date of interview) between (time and place of the interview).

I have enclosed a copy of the participant information sheet for your attention. If you have any questions with regards to this, or wish to change the time of the interview, messages can be left for me on 0116 223 1648 or alternatively my email address is len1@le.ac.uk, otherwise, I look forward to seeing you on (date of interview).

Yours Sincerely,

Lindy Newton
Trainee Clinical Psychologist

Appendix 5. Interview schedule

INTERVIEW SCHEDULE

INTRODUCTION

The introduction shall include information about the nature and background of the research, as well as issues of confidentiality, the format of the interview (including the tape recording and transcription) and any preliminary questions the participant may have.

BACKGROUND INFORMATION

Age band, ethnicity, profession, years in profession, years in current post.

When did you first start with individuals who have dementia?

What is your experience of this client group?

In what ways do you look after yourself personally and professionally?

How would you define the philosophy evident where you work (i.e. person centred care, medical model).

How would you describe your own personal way of working?

NURSING ROLE

How do you view your role at work?

What does this role involve?

What qualities do you feel you need for this role?

How do you carry out that role within your present working environment?

To what extent does this role fit in to the present working environment?

How does DCM fit in with this role?

Can you describe on what criteria you feel your work is judged?

DISCUSSING IMPACT

Is impact the right word to use, can you think of a better word to describe the part DCM has played for you? What does DCM mean to you?

In your own words could you sum up the impact/effect/influence (whatever word they use) DCM has had on you?

Thinking of this impact (use their word) on a scale with 0 being not much and 10 being a lot, can you rate where DCM fits on this?

Why this number?

Can you describe to me the different levels of impact (i.e. practical, psychological). At what level has DCM had the most impact?

INITIAL FEELINGS

Prior to the mapping exercise, what knowledge, if any, did you have about dementia care mapping and the philosophy of person centred care that underpins it?

Can you describe the preparation that took place and whether or not this was satisfactory?

At this stage what were your initial feelings/expectations about the mapping exercise?

Has your contact with those you look after ever been observed on another occasion apart from this mapping exercise? How did you find this experience?

ACTUAL EXERCISE

How did you find being observed during **this** mapping exercise? What did being observed mean to you?

During the mapping exercise can you describe whether or not you think the mappers got a true picture of life on this ward?

Can you describe whether or not your own working practice changed during the mapping exercise?

Can you describe if this exercise has had an effect on how you view your fellow colleagues?

Why do you think normal behaviour changes? In what circumstances?

How would you have preferred this process to be?

FEEDBACK

How was the experience of receiving feedback after the map?

What was it about the positive feedback that you found useful?

What was it about the negative feedback that you found unhelpful/useful?

Can you describe if the feedback received about yourself was similar to how you view yourself as a carer/human being? Did you view yourself any differently?

Can you describe if the actual process of DCM matched your initial expectations of how you thought it was going to be?

THE WIDER CONTEXT

What is the general view of DCM on the ward/within the hospital/within the trust?

What do you think DCM represents?

How does this fit with this environment (i.e. ward/ trust?).

Can you describe what you think the main barriers are in implementing DCM in more NHS trusts nationwide?

AFTERMATH

How do you feel the (feedback received from the) map has affected your:

- a) Philosophy of care
- b) General working practice
- c) Contact with the individuals you care for
- d) How you see yourself as a professional carer
- e) How you regard those you care for
- f) Satisfaction with the training you have received post qualification

What are your views on the usefulness of mapping as an exercise in evaluating the quality of care that is provided in settings such as the one you work in?

In your opinion whom does the mapping exercise benefit? Why?

What changes, if any, have you noticed about the way you work since the mapping exercise?

How do you feel you could take what you have learnt further?

GENERAL PROMPTS

Could you say a bit more about that?

Can you say a bit more about those feelings you have had?

What does that mean for you?

Is there anything you'd like to add to that?

What do you think about that?

Do you have any other examples of when that has happened?

How do you make sense of that?

ENDING

Is there anything else you would like to add?

Feed back and bring closure to the experience of being interviewed. Due to the open-ended nature of the questions it maybe necessary to review consent and ask about the inclusion of any information that the participant feels is too sensitive to include.

Provide debriefing; thank the individual, address any questions they might have, provide information on how I can be contacted, what happens next and dissemination of findings.

Appendix 6. Consent form

PARTICIPANT CONSENT FORM

I have had the nature of the research explained to me. I understand that any information I give will be anonymised and will not be able to be traced to me as an individual. I understand that no names, addresses or other information, which identifies individuals, will be held on computer or included in any report of the research.

I have had the need for audiotaping of the interview explained to me and I give my consent to the tape recording of the interview. I understand that if I give my consent to participate I can still change my mind and withdraw my consent at any point in the future.

I understand that it is my right to ask for any information that I consider too sensitive to include in the transcript to be omitted from the transcription.

I give my consent to be interviewed and for the interview to be audio taped and transcribed.

I give my consent for my interview transcript to be kept in the university library such that people may consult it in conjunction with the thesis.

Name (please print)

Name (please sign)

Date

Appendix 7. Example of line-by-line and focused coding

Line coding		Focused coding
<p>Staff going overboard</p> <p>The first time they were informed mappers were coming.</p> <p>Had some preparation for map</p> <p>Staff's behaviour over the top, negative attitude towards this.</p> <p>2nd map more knowledge on what would happen</p> <p>Felt more normal</p> <p>Talking to the patients, providing breakfast</p> <p>Normal behaviour/ Ward practices resuming.</p> <p>Didn't feel watched this time. Different from the first time, people did feel they were being watched.</p> <p>Questioning the motives of the mappers.</p> <p>Doubt in self, she may be doing it wrong. Questioning self.</p>	<p>/well I think everybody sort of went overboard</p> <p>the first time and like we was told they was coming to map and we, we knew what was going to happen because they'd already explained so I think everybody was like "Hello," you know a bit over the to top, overboard, pathetic. Yeah the second time it was just, yeah we know what's gonna happen and it was normal and yes like we all went good morning whoever, here's your breakfast, you've got, and it was just normal chit chat because we didn't feel like we was being watched, because the first time everybody thought oh we're being watched again and you know, are they really here for them and if we're doing it wrong should we be doing this/</p>	<p>Staff exaggerating behaviour when being observed.</p> <p>Given information prior to the map.</p> <p>By the second map, things getting back to normal and familiar ward practices being undertaken.</p> <p>Getting used to it, didn't feel so watched.</p> <p>1st time, feeling watched and questioning herself and the motives of the mappers.</p>

Appendix 8. Note for contributors, Journal of Advanced Nursing

General Author Guidelines

Scope

The Editors welcome scholarly papers that contribute to the development and understanding of all aspects of advanced nursing and midwifery care. Manuscripts of up to 5000 words (for the main text, excluding the abstract, summary statement, tables and references) on nursing and midwifery practice, education, management, and research with a sound scientific, theoretical or philosophical base, are encouraged. Papers will be accepted in two parts where the content in each paper addresses a different aspect of the research undertaken. Each part must stand alone and should reference but not replicate the other in any way. The submission of shorter papers (maximum of 2500 words of text and a maximum of 12 references) is actively encouraged. This option should be used for reporting research that is small in scale or exploratory and/or with findings that are inclusive or without potential for replication or generalization. All manuscripts are double-blind reviewed and medical statisticians review those with statistical content. Letters and commentaries up to 1000 words in response to papers published in the journal are welcomed in the JAN Forum section and should be sent to the Editor. These responses should be submitted within 2 months of the original material's publication.

Papers should be submitted exclusively to the *Journal of Advanced Nursing*. If accepted, papers will become the copyright of the journal. For full copyright details please see below.

The Editors will decide on the time of publication. Normally this is within 12 months of the date of acceptance. The Editors retain the right to modify the style of a contribution; major changes will be agreed with the author(s).

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- Manuscripts should be typed using double spacing size of 12 pt.

- **No identifying details** of the authors or their institutions must appear in the submitted manuscript. Author details will be inputted as part of the online submission process.
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Appendix 9. Record of category development

Record of category development

Initial category development following 1st three interviews – 20 categories developed

Carer's role
Experience of the client group
Aspects of learning
Understanding the person with dementia
Responsibilities of role
Role conflict
Rewards and challenges
Changing contexts
Different working environments
Changing practices
Reflective practice
Increased awareness
Barriers to DCM
Conflict amongst staff
DCM promoting change
Exploring perceptions and reactions of DCM
On being observed
Receiving feedback
On being a mapper
DCM reducing helping working practice

Later refinements and additions to categories following a further three interviews

Carer's role
Experience of client group
Aspects of learning - **changed to two separate categories: learning processes and learning consequences**
Understanding the person with dementia
Responsibilities of role
Role conflict
Rewards and challenges
Changing contexts
Different working environments
Changing practices
Reflective practice – **changed to identifying outcomes**
Increased awareness – **changed to identifying outcomes**
Barriers to DCM – **changed to obstructing learning**
Conflict amongst staff
DCM promoting change – **changed to sustaining learning**
Exploring perceptions and reactions of DCM – changes to responses
On being observed
Receiving feedback
On being a mapper
DCM helping working practice – **changed to DCM reducing conflict**

Additions

DCM inducing conflict
Wider, systemic conflict
Conflict of caring for someone with dementia

Category development and collapsing after reanalysis

Carer's role
Experience of client group
Learning processes
Learning consequences
Understanding the person with dementia – **collapsed into experience of the client group**
Responsibilities of role - **collapsed into experience of the client group**
Role conflict
Rewards and challenges - **collapsed into experience of the client group**
Changing contexts
Different working environments – **collapsed into changing contexts**
Changing practices – **collapsed into changing contexts**
Identifying outcomes
Obstructing learning
Conflict amongst staff
Sustaining learning
Responses
On being observed
On receiving feedback
DCM reducing conflict - **collapsed into DCM as a learning process both reducing and inducing conflict**
DCM inducing conflict – **collapsed DCM as a learning process both reducing and inducing conflict**
Wider, systemic conflict
Conflict of caring for someone with dementia

Additions

Structured learning
Unstructured learning

Final category development

Core category: Conflict
Role conflict
Conflict of caring for someone with dementia
Wider, systemic conflict
Conflict amongst staff
DCM as a learning process both reducing and inducing conflict

Main category: Carer's role
Intermediate level category: Experience of client group
Intermediate level category: Changing contexts

Main category: Learning processes
Intermediate level category: Structured learning
Intermediate level category: Unstructured learning

Main category: Responses
Intermediate level category: Being observed
Intermediate level category: Receiving feedback

Main category: Learning consequences
Intermediate level category: Identifying outcomes
Intermediate level category: Sustaining learning
Intermediate level category: Obstructing learning