

Using Multi-Sensory Environments (MSEs) with people with dementia

Factors impeding their use as perceived by clinical staff

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d e m e n t i a

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SAGE PUBLICATIONS

www.sagepublications.com

VOL 3(1) 45-68

Abstract Utilizing action research, the clinical application of a Multi-Sensory Environment (MSE) in the field of old age psychiatry was explored and developed over a four-year time span. This article reports on factors identified as mediating against its use as reported by clinical staff. Conceptual and theoretical considerations considered of utility beyond the study's context are presented. Expectancy of outcomes, the predilection of individual members of staff to engage in this form of therapy and the influence of an organization's orientation towards such therapy are highlighted as specific areas for attention.

Keywords action research; Snoezelen; therapy; utilization

Introduction

This article reports on selected outcomes from a four-year action research study exploring the use of a Multi-Sensory Environment (MSE) with older people with dementia. The literature around the use and utility of MSEs is summarized and a study exploring the clinical application of such an environment is described. Issues considered as having utility beyond the study environment are subsequently presented.

Literature on MSEs

MSEs are purpose-built units or rooms utilized for the application of multi-sensory stimulation. Their development has arisen out of an identified need to modify the environment for those who are severely disabled, the goal being stimulation of the primary senses to generate pleasurable sensory

experiences in an atmosphere of trust and relaxation without the need for intellectual activity. Exposure to multi-sensory stimulation occurs through the agency of the carer, nurse or therapist who facilitates the development of a relaxing and supportive environment. The use of MSEs has become considered as a positive adjunct to the meaningful care of older people with dementia, particularly in terms of affording a medium through which communication may be facilitated (Howard & Wareing, 1995; Morrissey & Biela, 1997; Pinkney, 1995; Wareing, 1995).

Two main areas of research on MSEs are identifiable: learning disability and older people. This literature needs to be placed within the context of resistance to formal evaluations of the effect of such environments. According to Ashby, Lindsay, Pitcaithly, Broxholme and Geelen (1995), the fear was that 'it would unduly force the environment into a more objective and product orientated dimension' (p. 303) which runs counter to its espoused humanistic ethos.

With regards to learning disability, attempts have been made to isolate preferred stimuli (Hutchinson & Haggar, 1994; Thompson & Martin, 1994) and emphasis has been placed on the influence on behaviour (e.g. Doble, Goldie, & Kewell, 1997; Long & Haig, 1992; Shapiro, Parush, Green, & Roth, 1997; Withers & Ensum, 1995). Findings suggest a calming effect, the frequency and duration of maladaptive behaviours being decreased. Exceptions relate to an identified impact on concentration (Ashby et al., 1995; Lindsay et al., 1997) and the role of staff using the MSE (Haggar, 1994). This latter aspect is one that appears to be under researched, particularly when considered in relation to an espoused requirement for its skilled use (Hulsegge & Verheul, 1986; Kewin, 1994).

Studies tend to be small in scale, with sample sizes ranging from one to 27. Despite a growing body of evidence, much of this is plagued by methodological problems and only two experimental designs are evident. There is a wide variation in the frequency of sessions, their duration, the number of clients experiencing a session, the number of staff supervising the session, the location of the MSE and whether staff delivering the session know the client or work in the area where the MSE is delivered. As a consequence, it is difficult to make comparisons between studies and the effects of MSE are difficult to decipher. Additionally, the imposition of rigid control associated with experimental studies might be viewed as influencing the nature of the therapy itself, which is promoted for its individualistic and flexible qualities.

With regards to older people, several reports indicate that the MSE contributes to small, specific, short-lived, adaptive behavioural changes. (e.g. Dowling, Baker, Wareing, & Assey, 1997; Hope, 1998; Moffat, Barker, Pinkney, Garside, & Freeman, 1993; Spaul & Leach 1998).

Early work is characterized by an uncritical acceptance of the therapy and a focus on process issues related to its use. For example, Pinkney and Barker (1994) offer information and advice specific to using MSEs with older people. They argue that the environment is age appropriate, enjoyable and failure free and that the fact that no intellectual reasoning or verbal response is required makes them particularly appropriate for older people with dementia. Process issues are also raised by Benson (1994), particularly in terms of adjusting the internal environment to suit older people with dementia. Examples include the use of abstract projected images rather than pictures and avoidance of mirrors, which could promote mis-identifications.

In a Dutch study incorporating a cross over design (Kragt, Holtkamp, van Dongen, van Rossum, & Salentijn, 1997), 16 subjects were randomly allocated to one of two groups experiencing either the experimental condition first (exposure to an MSE) or the control condition first (activity in a living area). Criteria for inclusion in the study included the fact that the client met local criteria for MSE therapy. These implied that verbal contact could no longer be made with the client and that the stimuli presented in the room would influence the person's behaviour positively.

Results indicated that statistically significant differences in the level of behavioural problems were identified with fewer being exhibited in the MSE. The authors suggest that this relates to a higher level of well-being in such individuals. However, the fact that the stimuli used in the MSE were ones those subjects were already known to respond to positively could explain the differences identified. Three different occupational therapists delivered the sessions and inter-therapist differences are not controlled for. The absence of a particular behaviour does not necessarily imply the presence of positive feelings and the claim that the therapy enhances well-being is challengeable. The power of the study is limited due to the small sample size and blinding at the level of evaluators was not possible.

Baker et al. (2001) differentiate the process of multi sensory stimulation (MSS) from the mode of delivery and have attempted to isolate the effects of MSS. Results from a randomized controlled trial ($N = 50$) indicate that MSS appeared to have a greater influence on aspects of communication in comparison to one-to-one activity as well as leading to improvement in behaviour and mood at a four-week follow-up. This is a notable study, being the first indication of any long-term benefits of exposure to MSEs. The authors report that, despite randomization, there were significant differences in the cognitive abilities between the two groups with the MSE group scoring higher, although the findings have statistically accounted for this variable. Subjects came from two different hospitals and their relative distribution is not reported. In addition, despite an assurance that staff

delivering the sessions were equitable in terms of skills and training, no criteria for establishing such a contention are offered.

The literature in the arena of older people with dementia has a similar quality to that associated with learning disabilities. There is an emphasis on the therapeutic/treatment effect of the intervention, which appears to be influenced by the notion of sensory deprivation. There remains, however, a fundamental tension between their utilization as a therapeutic modality or a leisure resource. This is evident in the more developed critical perspective evident within the field of elderly care.

For example, the finding that not all clients respond positively (e.g. Dowling et al., 1997; Hope, 1998) has led to challenges regarding a 'failure free' stance. The potential for pitfalls associated with over reliance on technical equipment have been cited (Ellis & Thorn, 2000; MacDonald, 2002; Mount & Cavet, 1995) and the extent to which MSEs are age appropriate has been questioned (Garnham Hooper, 1995; MacDonald 2002; McCarthy, 1995; Orr, 1993). Problems in sustaining interest and motivation in the use of such facilities have been cited (MacDonald, 2002).

There are fewer reported studies than in the learning disability field and only one RCT that identified a bias in the experimental group. While behaviour remains a consideration, there is also a focus on mood and conversation. A treatment model has supplanted the original notion of the MSE being something that impacted on quality of life with no specific therapeutic outcome. To this end, studies of their impact on behaviour are notable. What is unclear is the specific effect of the MSE and whether it serves best as a relaxing or stimulating environment. In addition, the strength of supportive evidence regarding outcomes in the field of elderly care is weaker than in learning disabilities. What can be discerned though is a sustained reference to the impact that the MSE has on communication. Surprisingly, despite the initial emphasis on the role of the carer in the successful utilization of such a therapy, little systematic work has been undertaken on the process issues associated with its use.

It is reasonable to suggest that, in considering an environment that is thought to influence communication, examination should consider all parties in that communicative process. As a consequence, the role of the staff involved in the process is critical. The following describes how such issues were revealed through the cyclical process inherent in action research as central to the consideration of the use of an MSE.

The study

The department of old age psychiatry in which the study took place had a total of 52 in-patient beds. An MSE was located on the first floor nearest to,

but outside, a continuing care area. The room had within it a bubble tube which is situated in front of two mirrors to enhance the effect of bubbles rising in a large tube filled with water, (back-lit by coloured bulbs), a fibre-optic spray, (a large spray of fibre-optic cables which change colour in a rhythmical manner), a cassette player to provide a musical background, a projector to project abstract and specific images onto the walls, a disc-type projector and mirror ball. Coloured light from the projector is redirected off the mirror ball to generate patterns on the wall, which may be stationary or mobile. Finally, a range of equipment such as soft balls and spike rings are available to generate tactile sensations. The facility is not untypical.

The study took the form of action research comprising three distinct phases over four years and was undertaken in collaboration with participants working in the clinical setting. The design is shown in Table 1. Phase 1 was concerned with development of a deeper understanding of a perceived problem that the MSE was under-utilized. A group of staff meeting to consider the use of the MSE was in situ and agreed to meet with the researcher (KH) to explore avenues in terms of addressing the perceived problem of low utilization. The group consisted of representatives from each ward area (one charge nurse and two staff nurses), one physiotherapist and one occupational therapy assistant. Within the context of the methodology, this represented the origin of a collaborative group. The concept of collaboration and/or participation, are ones in which many authors concur (Carr & Kemmis, 1986; Hart & Bond, 1995; Holter & Schwartz-Barcott, 1993; Meyer & Batehup, 1997) and has been described as a fundamental aspect which distinguishes action research from other forms of research (Waterman, Tillen, Dickson & de Konig, 2001).

Phase 1 also included a period of immersion in the clinical arena, one of the objectives being for the 'outsider' researcher to integrate into the care environment and develop collaborative relationships. A consideration was the expectation that, subsequent to inclusivity and minimization of power differentials, staff would exert greater influence on decision making and that there would be a smoother transition regarding any subsequent change introduced.

The primary method of data collection in Phase 1 was 15 semi-structured interviews, informants being selected via a process of purposeful sampling, to identify influential factors related to the use of the MSE.

Associated objectives were:

- to identify if there was a consensus regarding a perception of low utilization of the MSE;
- to ascertain the staff's perspectives on use of the MSE;

Table 1 **Study design**

Phase	Description	Method	Sample	Outcomes
1	Problem identification	Immersion in clinical arena	80 days	Democratization of research
		Field notes	N/A	Consensus regarding low utilization of multi-sensory room
		Interviews	15 people	Range of mediating factors identified
2	Action and evaluation (i)	Educational innovation	N/A	Focused on mediation at the level of the individual
		Focus groups	15 people	Potential for 'ideal type' response from staff
		Interviews	4 people	Further development of mediating factors
3	Validation	Questionnaire	68 people	Reinforcement of findings from phase 2 and validation for action
		Action and Evaluation(ii)	Pursuit of three collaborative objectives	N/A
	Action and Evaluation(ii)	Photographic record	N/A	Improvement in decor of room
		Review of care plans	59 records	Improved use and record keeping
		Questionnaire	59 people	Use of room maintained over time
		Interviews	14 people	Further mediating factors identified

- to identify influential factors related to the use of the MSE;
- to consider which, if any, of these factors might be amenable to change.

Purposeful sampling indicated staff that had direct knowledge of the use of the MSE as well as representation of those who had not used the room. The notion of 'fair dealing' (Murphy, Dingwall, Greatbach, Parker & Watson, 1998) led to the consideration of views from unqualified and qualified nursing staff as well as from professionals allied to medicine (PAMs). No refusals were encountered which might be explained by the period of immersion and the establishment of positive working relationships. The sample is outlined on the following page.

Interviews were transcribed and edited. The data were anonymized and identity codes assigned. Transcripts were prepared for Computer Assisted Qualitative Data Analysis Software (CAQDAS) using NUD.IST (Non-numerical Unstructured Data. Indexing, Searching and Theorizing) which is a 'code based theory builder' (Morison & Moir, 1998).

Sample

Qualified nursing staff	8 (4 F grade staff nurses, 3 F grade sisters/charge nurses, 1 G grade)
Nursing auxiliaries	3 (A grade)
Professional allied to medicine	4
Total	15 (11 female, 4 male)

Average years experience of working with people with dementia = 6 years 4 months (Range 2–15 years)

Average years experience of working in unit = 5 years 4 months (Range 2 months–13 years)

Transcripts were coded using ‘text units’, the basis for analysis. Text units constituted passages of text that were meaningful, predominantly sentences but sometimes paragraphs where it was apparent that the meaning of one sentence would not be apparent without reference to preceding or subsequent units. The decision on the size of a text unit is important in the process of analysis as it represents initial open coding as a precursor to the identification of concepts within the data (Strauss & Corbin, 1990).

Sandelowski (1995) makes a distinction between analyses (the separation of elements of data) from interpretation (the knowledge produced as the end point of analysis). The latter activity was undertaken in collaboration with group members. Findings were reported back to the collaborative group both during emergence and in their final form which helped determine if analysis was ‘on-line’, that is, if it resonated with the staff’s perception as well as acting as a form of member checking.

Results supported the view that utilization of the resource was low and Phase 2 of the study attempted to address the identified factors by means of an educational provision delivered as a series of study afternoons over a five-month time span. The afternoon was divided into a theoretical and an experiential session. The objectives of the workshops were:

- to trace the development of the multi-sensory room;
- to examine its utility in the care of older people;
- to review relevant research findings;
- to address concerns raised by the interviewees about using the room and critically explore its use with staff; and
- to promote a degree of comfort in using the equipment by allowing staff to experience the facility and its use.

The group felt it appropriate to include some form of advice on ‘a right way’ to use the MSE which would form the basis of future development as individuals experimented and became more confident in their use of the facility. As a consequence, a protocol for use was generated, content being

gathered from the literature, from the experiences of staff in the collaborative group and from contact with other individuals and organizations using an MSE. This covered preparation, initiating the therapy, gaining attention of the client, gradually increasing the stimulation, enabling, and winding down the session. Additionally, it addressed some 'frequently asked questions' regarding the use of the room and offered practical advice based on experience and the literature as how best to respond in specific circumstances. The protocol was not intended to be prescriptive. It was emphasized that we were expressing a view on the desirability of action developed from the best available evidence but we were hopeful and expectant that such evidence would be influenced by the staff's own experiences.

Study afternoons were planned, in accordance with the group's advice, on one, different, afternoon a month. This was an attempt to deal with the vagaries of ward work and other timetabled commitments. A room was booked for the delivery of the sessions in the Trust's educational area. It was considered educationally sound to deliver the theoretical session in an environment better suited for teaching purposes, whilst the removal of staff from the clinical environment helped reinforce the importance of the session.

Nominations were invited from the wards and PAMs, although the voluntary nature of the sessions was emphasized. In addition, an individual invitation was sent to staff in the unit by email and an article was placed in the directorate's Christmas newsletter.

Staff attending a study day were asked to attend a follow-up session one month later. This was to form part of the evaluation strategy through the auspices of focus group interviews. Consequently, staff were invited to establish an action plan for using the room and were asked to provide feedback on the experience. This was done for two reasons. First, it gave staff a target for action and provided motivation to use the room. Second, the system allowed for the previous group's experiences to feed into the subsequent group's study day.

Twenty-nine staff attended (21 Nursing staff – 18 qualified, eight unqualified; eight PAMs) and data were subsequently gathered from 19 of these participants through the auspices of focus groups and individual interviews.

Data analysis was undertaken using the procedures outlined above. Mediating factors were expanded upon and related to the sense of value attached to the MSE as a therapy and the extent to which the culture of care supported this. The potential for positive outcomes for both staff and clients was also identified but is not considered in this article. However, they were viewed as a legitimating factor in continuing to promote the use of the

room. This was an important finding in terms of justifying time and energy input.

A second action and evaluation phase (Phase 3) began whereby the group established three, context-specific, action objectives aimed at addressing the mediation thus far identified. These were to improve the decor of the room, to promote use of the MSE within a plan of care and to continue to raise the profile of the MSE and ultimately increase its use. There was recognition, however, that the group was not neutral in its response to the analysis from Phase 2. Discussions raised the prospect that the use of the room might be promoted on the basis of limited data and that we might be guilty of pursuing our own agenda as a group who felt positively towards the use of the room. Agreement was reached that it would be wise to validate the objectives with a larger population as well as explore the extent to which others could identify with the outcomes from Phase 2.

The method chosen was questionnaire, the aim being to obtain a 'snapshot' of staff's awareness, understanding and use of the multi-sensory room. It offered advantages in terms of efficacy at obtaining data from a large number of respondents in a quick and relatively cheap manner (Barker, 1996). The questionnaire was generated following discussion with the group, with reference to findings thus far, piloting with staff in the unit and reviewed by a statistician.

Respondents were asked if they had any awareness of the concept of MSS or where the room was situated. If they had been in the room, they were asked for their opinion on comfort, size, location and decor. A series of questions asked about thoughts on its use, actual use and format of any education received. A section, reserved for those who had used the room, ascertained staff's expectations and perceptions associated with a range of outcomes generated from the feedback interviews. Information on staff's confidence with using the equipment and utilization of feedback mechanisms was also obtained. Finally, demographic data were requested.

It was considered feasible to ascertain views from staff that reasonably could have access to the room to gauge their views. Consequently, all nursing and PAM staff working in the directorate were targeted ($N = 131$). Data was obtained from 68 respondents. To present specific data analysis would be unwieldy in the context of this article, but results revealed good awareness of the concept of MSS, but a desire for further education. The decor of the room was considered unsatisfactory by half of those who had seen it. The extent to which use of the room was part of a planned process of care delivery was questionable with a gap evident between awareness and use, and care planning and recording. The findings from the questionnaire reinforced the group's decision to take the identified action.

The second action phase was undertaken and subsequently the study as a whole was evaluated by means of 14 interviews. The sample comprised original respondents who remained in employment ($N = 7$). Two were individuals who had also made a significant contribution in the collaborative group and the three additional members of the core group were included. The view of those closest to the study was compared and contrasted with those further from the centre and the perspective of a medic and a psychologist was also obtained.

Findings

Action research is described as being more difficult to report than other forms of research (Dick, 1993). The methods section describes the range of processes engaged in during data collection. In line with the cyclical process data emerges at different stages of the study and affords new insights into relevant factors. This section, therefore, presents a summary of findings from the full study rather than from the discrete phases as a way of managing this issue, to improve readability and as an appropriate manner in which to highlight theoretical and conceptual issues that are offered as worthy of consideration beyond this study's context.

Information is presented specifically concerning factors identified as impeding the use of the MSE in this particular setting. Two overarching topics encompass the range of findings that influenced the use of the MSE. They are factors relating to individual staff members and factors relating to the organization of work. Data supportive of the contentions being made is offered and where appropriate indication is made of the phase (P1, P2 or P3) to which this information relates.

Factors relating to the individual

A wide range of comments were made which revealed that use of the MSE was related to the skills and attributes of the individual member of staff who used it. A deficit in the identified skills and attributes was presented as an important influential factor in utilization of the resource. For example:

I think it's actually quite a skill to elicit responses from people and to also be able to feel comfortable yourself. (P1)

Other examples such as 'being aware of your own feelings towards using the room', 'engaging people', 'using yourself', and 'having insight to realize what is going on' suggested a reflexive and sensitive approach was considered something that a positive user of the room should possess. However, this espoused need was inhibited by concerns about mastery of

the equipment in the room. For many there was notable insecurity and lack of confidence about their own use of the facility. For example:

I would be a bit unsure about using it. I don't feel I know enough about it to use it properly. (P1)

This was presented as a factor in low utilization and staff identified in themselves a need for training. Such comments were particularly influential in determining that the response in Phase 2 was based on educational lines. Staff indicated that if they were uncomfortable with using the equipment the degree to which they would demonstrate competent practice outlined above would subsequently be impaired and negatively influence therapeutic outcomes:

It's no good going in with the patient and then fumbling with switches . . . It's not very professional either really to convey that you are not quite sure what you are doing. (P1)

Worryingly, for a minority, the technical aspects of the therapy appeared to take precedence without apparent reference to interpersonal aspects. For example:

I wouldn't have said that you need direct skills . . . It's like you just press that button and switch that on. (P1)

Concerns were expressed about whether the MSE might be potentially frightening or that staff could be doing harm to the client. One respondent thought that epileptic seizures might be induced. With regards to the former, the nature of the relationship one had with the person staff took to the MSE was crucial. Notions of trust and continuity of care were highlighted and were described as being negatively influenced by the organization of care. These are discussed later.

Staff expressed contradictory views as to which individuals might best benefit from using the MSE. For the majority, the less severely disabled person was considered more likely to have a positive experience. For example:

The people who are able to voice their opinions, yes they are the ones who respond in a way more positive as far as the staff go because they can say, yes, I enjoyed that. (P1)

This view was challenged as being carer-centred and the necessity of providing opportunities for all and then judging success was emphasized:

We shouldn't be looking at taking people with certain diagnoses at certain levels of dementia. It should be open to everybody and encouraged with everybody. (P1)

Interestingly, after such issues had been addressed by the educational input and use of the MSE was facilitated, some staff indicated that they did not see using the room as 'real' work. They expressed a feeling of guilt about using the room and were worried about being seen as having a lighter load or deserting colleagues and not taking their fair share. For example, one auxiliary nurse comments:

No one ever said anything to me you know and no one ever accused me of this but I can't help thinking that people might be thinking what am I doing. (P2)

Qualified staff also expressed such sentiments:

You feel guilty don't you. You do when the ward's very busy . . . You realize that everyone else is rushed off their feet and you're going upstairs to sit in a room. (P2)

Staff later in the study argued that they needed to demonstrate their worth but favoured more tangible means such as maintaining the public persona of the ward. Anything directing time and energy away from this was perceived as detrimental. One staff nurse comments:

This is the impression that you have for geriatric wards, if we make sure that the patients are dressed appropriately, stylishly or whatever, and the ward is lovely and tidy, and it doesn't smell and it's nicely decorated then people will think that we're doing a good job and it's almost like if we start to provide something else then that side of it will slip down and people then can't see what we are trying to do. (P3)

For some individuals, personal discomfort experienced when engaging with older people at the level required was presented as a limiting factor. Using the MSE was associated with childlike or immature behaviour and the extent to which some staff felt able to 'join in' was variable:

You would have to join in that kind of childlikeness too if you were in the room wouldn't you. (P3)

I'm sort of generally aware perhaps there's an ethos which has a more sniggering kind of attitude towards it. (P3)

In summary, staff expressed concern about their lack of knowledge and insecurity regarding using the facility in the context of a generally well developed conceptualization of what was required of the therapist. Several expressed feeling guilty when using the room as they had difficulty in aligning this activity with 'real work'. Finally, some staff commented on the childlike nature of the activity and expressed discomfort about engaging with their clients in this manner.

Issues relating to the organization of work

As indicated, the nature of the relationship with the client being based on trust was emphasized but difficulties in achieving this were recognized. The therapist having prior knowledge of the client was seen as a positive aspect both in terms of helping them feel more comfortable as well as evaluating responses:

I think it does have to be somebody who knows what the patient's like normally, what will be a beneficial reaction for that patient. (P1)

A particular concern was raised about client's perception of events. One nursing auxiliary commented 'if you're putting them in a room like that, it's like being in a spaceship to them I bet' (P1) and staff discussed their concerns about how best to explain what was happening to someone with cognitive impairment. (Indeed, one outcome of the study was the generation of a photograph album to assist in this process.) There was recognition that initiating the therapy could be problematic:

Having to go to go and collect a key from someone . . . It immediately gives the individual the feeling that it is not that accessible. (P1)

The room was located on the first floor of a two-story building and situated outside a ward area. Several people commented on the negative impact this had. For example:

One thing I feel is the situation of the room isn't helpful. I feel it's like out of sight therefore out of mind. So people forget about it. (P1)

This sentiment was echoed on many occasions and the notion of 'invisibility' seemed to the group to encapsulate a perception of the facility. Time and resources were highlighted as influencing variables, particularly staffing levels. Leaving the ward was not an option if staffing numbers were low but skill mix was also cited. Qualified nurses did not feel that trust or continuity was fulfilled by delegating this to a temporary member of staff (a bank nurse). For permanent staff, leaving the ward to take clients themselves was not considered an option. Nursing auxiliaries indicated that they felt that they could not leave the ward when a bank nurse was in charge as they, having local knowledge, needed to be present to act as a 'safety valve'. Leaving the ward with one client appears to be rejected on the basis of an overall concern for the remaining clients' welfare.

It was apparent and understandable that some other work took precedence. However, the extent to which this resource had become relegated down the order was significant. There was support for the contention that local factors were influential. Staff, by their own admission, had been faced with the issue of 'survival' for considerable periods of time due to several

service reconfigurations. Consideration of the use of the MSE became pushed to the back of an ever-increasing list of actions all of which had greater priority. The question remained though, why the use of this resource was in the realms of the latter grouping, the 'like to do', and why it was perceived in a relatively devalued manner. Staff commented on the impact that the culture of assessment and outcome-focused activity was having on care-related practices:

When I first came here, in things was engaging, activity you know that sort of thing. Now buzzwords are assessment and liaison . . . we don't seem to provide any more we advise. (P3)

Respondents highlighted how there now was less time to spend with clients because the length of stay had fallen and that opportunities to engage with clients and plan care-oriented approaches were reduced. The place of the MSE in such a culture is questionable. Suggestions were that the aim of the room was misaligned with the evolving aims of the unit: For example:

It isn't regarded as relevant in people purely having an assessment. Whether that's right or not is obviously debatable. (P3)

But if for whatever reason it's thought that our function is mainly assessment then you know the more kind of therapeutic management caring issues are perhaps going to be pushed to the background. (P3)

The emerging consensus was that the MSE was an element of practice that had evolved to a more distant point in terms of care. Accentuating this outcome was a perceived emphasis on assessment, throughput and productivity:

I don't think people value very much things that help the person at the time. It has to have some effect later on otherwise it's not worth doing. There is that kind of attitude I think. [Question: Where does that come from?] We're always asked to prove and show evidence for and all our practices have got to be evidence based, research based . . . It's looked down on if you said well the patient seemed to be better afterwards. (P3)

For one staff nurse, this focus was perceived as impacting on her professional role:

It is less the person you are at work, more the product at work. It is what you can deliver in terms of measurable outcomes in terms of tasks in terms of managerial duties rather than the extent that you make contact and communicate with the people that you are responsible for caring for. (P3)

In summary, in terms of work organization, maintaining trust within the client/carer relationship was highly valued but resources, geography and feedback mechanisms were cited as challenging this. However, the MSE

was also being conceptualized as a therapy whose goals were perceived as fundamentally opposite to contemporary trends in health care delivery.

Discussion

The findings from this study can be considered within the wider context of attempting to change and improve practice and the desire to positively influence the culture of care. A range of options exists in relation to achieving this goal. For example, Good (2001) promotes a project management model with a formalized framework for the analysis of development needs, the impact of the external environment, the preferred end point and a consideration of competing interests. Conversely, the notion of continual improvement in quality is cited as a more productive framework in the context of health and social care delivery (Cox, 2001) aligning with a practice development model outlined by Clarke (2001). This highlights the multiple understandings of philosophy and practice inherent in dementia care.

Gilloran and Downs (1997) draw attention to the psychological processes that can occur when staff are faced with new ways of working, highlighting how there can be an implicit condemnation of the old way. The issue then is about how we understand individual's perceptions of structural changes so that the impact of change may be better managed. Cantley (2001) considers this relationship in offering the concept of 'street level bureaucracy' (Lipsky, 1980) as an explanatory framework. Faced with demands that often exceed resources, front line staff enact discretionary decisions as a means of mediating policy and adopt 'routine approaches to processing clients in ways that make life manageable' (Cantley, 2001, p. 239). Such practices are often at odds with organizational policies and indeed, individuals' service ethos. The argument that Cantley (2001) pursues is that for change to be meaningful such factors need to be recognized and taken into account.

Similarly, the demands placed on individuals to deliver quality care are pertinent. Miesen (1999) considers psychological components involved in the process of caring for a person with dementia in outlining a conceptual model derived from Attachment Theory (Bowlby, 1969). Faced with unfamiliarity in their world, the person with dementia behaves in a manner that seeks closeness and proximity, i.e. attachment behaviour. In this respect the carer's response, as a rule, addresses this need and, metaphorically, offers handholds and beacons for the person with dementia so the carer becomes the attachment figure. In so doing, the nature of the relationship for the carer undertakes a shift from 'working with' towards 'caring for', characterized by caring behaviour conceptualized as attachment. The issue for

Miesen (1999) is that whilst such relationships are desirable they necessarily have an emotional dimension. A carer needs initially to be ready and willing in the first instance to engage in this manner but perhaps more importantly needs to have the awareness to effectively balance closeness and distance. An important consideration, therefore, in attempting to bring about meaningful change, is the extent to which carers are aware of the dynamics of their relationships and the influence on subsequent behaviour.

The process of action research draws on a practice development ethos that recognizes the multi-faceted nature of practice, promotes collaboration and ownership and seeks, over time, to identify relevant components located within individuals and the organization as precursors to change. In so doing, it begins to identify tensions that exist within individuals and the systems that militate against such a pursuit. In relation to the utilization of a specific psychosocial approach to the care of the person with dementia, this study has identified (and attempted to address) a range of factors operating at both the organizational and individual level that militated against utilization.

The organization's orientation towards the therapy

Some staff did not perceive using the MSE as 'real' work and there was guilt associated with using it. Staff indicated that some form of permission was required before they felt at ease in using the facility. There appears to be a tension at the boundary between the desire at an individual level for holistic care and the culture in which this is delivered. When engaged in such care, some staff felt 'guilty' because they were not attending to other aspects of care, perceived as being higher priority.

Comparison can be made with Lee-Treweek's (1994) work with auxiliaries in a nursing home environment. There, the presentation of the 'lounge standard' client, one who was clean and tidy, symbolized the job done properly. Lee-Treweek (1994) indicates that in her study pursuit of this goal generated and justified abusive practice, which is not the case being made in this instance. However, it is suggested that work supporting the clean and tidy presentation of the client is perceived as safe practice, which does not challenge the status quo. In the presence of tensions and frustrations it is understandable if practitioners revert to unambiguous, safe practice.

Assessment was identified as increasingly important and comment was made as to how this aligned with wider political forces encapsulated within the NHS and Community Care Act (1990). As a consequence, the role of the unit had changed with the trend towards local authority provision giving rise to some staff feeling that their caring and restorative function

was being diluted in the context of the specialist secondary service. The use of a therapy such as the MSE might be seen as becoming an unintended victim of the political process and raises the question as to whether it should be maintained and defended.

The political nature of health care choices is raised by Liaschenko (1997) who argues that the pursuit of 'person knowledge' is critically important in longer-term relationships in order to promote and maintain individual integrity. Person knowledge is based on understanding the biographical life of the person we care for and is distinct from case or client knowledge. Liaschenko (1997) questions whether it is both desirable and possible to achieve this in all caring contexts. A central question for her is a political one relating to what kind of health care we envision both as a profession and as a society. A tool which might promote the accumulation of person knowledge (and the case is made that the MSE has such potential, see Hope, 2001), might be best placed in environments where the culture explicitly supports their utilization rather than existing in a setting where their function is perceived as an 'add on'.

Selective use of the facility

Being selective about which clients to take to the room can be considered an understandable response from staff in an attempt to focus energy on clients perceived as being more likely to respond positively. There is a pervasive sense of staff wishing to promote positive outcomes and avoid negative ones in using this facility. The issue of a relationship based on trust can be seen as a mechanism by which coercive practice is avoided. Similarly, the choice of who to take to the room appears influenced by the perception of successful outcomes being more likely to occur. However, this judgement was characterized by inconsistencies. How might such a response be explained?

Attribution theory concerns itself with people's perception of causality and the characteristics that are assigned to people or objects (Kelley, 1967). Kelley's (1973) seminal work on the notion of causal analysis hypothesises suggests that we attribute behaviour in others as within their internal control according to three criteria, which individually may be rated high or low. The criteria are:

- consensus: the extent to which others behave in the same way in the same circumstances;
- consistency: the extent to which the person responds in the same way over time; and
- distinctiveness: the extent to which the person responds in the same manner to other similar stimuli.

Kelley (1973) maintains that behaviour is attributed to the individual if consensus is low, consistency is high and distinctiveness is low.

An important consideration in this instance is staff's expectations of what constitutes a positive experience. It was reported that it was more difficult to gauge success with more cognitively impaired clients. In addition, Nay (1998) points out that reciprocity is a factor which makes caring more satisfying and is more likely to occur in the client who can verbally respond. In this context, by applying Kelley's (1973) formula to the study, a proposal for the stated attribution can be articulated.

A client with low levels of cognitive deficits is more likely to be seen to respond positively to the multi-sensory room by virtue of their ability to vocalize their view and ability to demonstrate a positive response non-verbally. From the staff member's perspective, not all clients respond positively (low consensus), the client is likely to have responded positively before (high consistency), and is likely to show positive responses to other stimuli/activities (low distinctiveness).

Similarly, with the more disabled client who is perceived not to be responding, the staff member interprets this event in the context that: not all clients respond negatively (low consensus); the client is likely to have responded negatively before (high consistency); and is likely to show negative responses to other stimuli/activities (low distinctiveness). In both instances the conditions are met for attributing the behaviour observed in the room towards the client. Importantly, this mediating factor is placed within the realms of the individual member of staff because it is their attribution rather than the client's response that is operational.

Kelley's (1973) theory makes assumptions about human cognitive processes and criticisms which have been aimed at this view challenge the notion of people as rationale information processors and whether any analysis of social interaction occurs at all (Harvey & Weary, 1981). An alternative and more recent development of attributional theory is that of Weiner (1992) which locates the perceived cause of an outcome upon four cues: Ability; Others (Difficulty); Effort; and Luck. These cues are classified across three dimensions: stability, locus of control and controllability. Stable factors (ability and difficulty) are related to the expectancy of a future outcome. In other words, if the cause of behaviour is attributed towards an individual's ability (a stable factor), then the observer is more likely to have greater expectancy that such behaviour will be repeated in similar circumstances. This in turn will influence the observer's behaviour towards that individual.

Fopma-Loy and Austin (1993, 1997) suggest that, in the case of dementia, the potential for behaviour being incorrectly attributed to stable factors, namely the disease process, is greater. They argue that if a caregiver

attributes a person with dementia's response to himself or herself, as opposed to the dementia, then this is more likely to lead to positive behaviour by the carer.

Qualities and skills of the carer

The final area to be considered that emerges from the study is the level of comfort staff have with using the facility and the qualities and skills that a carer might usefully possess. For some, the perception that using the MSE aligned with play for older adults was a limiting factor, whilst for others this was seen as appropriate. Ambiguity and discomfort regarding age appropriateness is not confined to the use of an MSE (Ehrenfeld, 1995). Johnson (1998) makes a plea for 'simple and normal activities of daily living' in the field of dementia care, although what is perhaps missing from these debates is an overt recognition of the severity of the disability that some people with dementia have and the inappropriateness of so called 'normal' activity.

Pulsford, Rushforth and Connor (2000) maintain that a willingness to enter into play-like scenarios with older people is a relevant factor and suggest that staff demonstrating effective strategies draw on transferable skills developed working with pre-school children. Perrin and May outline the concept of a 'good enough mother' to describe the characteristics of a dementia therapist. They argue that this reflects the whole procedure of dementia care described as:

a steady presentation of the world to the person who has dementia; small manageable doses – small enough not to muddle, large enough to satisfy and be enjoyed; protection from complication; holding; handling; sharing. (2000, p. 150)

Perrin and May maintain that certain characteristics need to be present in the individual including the ability 'to appreciate the significance of play in the therapeutic relationship and to develop a playful approach' (2000, p. 151).

The issue may then be what factors promote or inhibit an individual's predilection to engage in such work. Are some carers, by virtue of their personality or possession of inherent skills, more likely to want to engage in such a mode of care and consequently likely to promote positive outcomes? If so, what are these traits? Brechin (2000) maintains that to respect and respond to someone, respecting their integrity and personhood, means making real contact, which involves giving of oneself, and inevitably realizes strong emotions. Parallels can readily be seen with Miesen's (1999) conceptual model of attachment. Brechin (2000) argues that it is often the case that carers defend themselves from such emotions

and the articulation of the normalization debate may be an indication of such defence mechanisms.

Summary

This action research study commenced from the premise that utilization of an MSE was low and revealed a complex set of explanatory factors. Three areas of influence have been explored: expectancy of outcomes, the predilection of individual members of staff to engage in this form of therapy, and the influence of the organization's orientation towards the therapy.

Kitwood (1997) argues that a fundamental challenge in moving towards new cultures of dementia care is creating environments wherein caring feels natural. He argues that for a culture to be orientated towards the person with dementia such care needs to encapsulate facets of an I-Thou relationship (Buber, 1937) characterized by awareness, openness, presence and grace. In contrast, Kitwood (1997) maintains that an I-It orientation, wherein the person with dementia is objectified and devalued, is justified and systematized within health care delivery by virtue of its history and, more recently, medicalization of the condition. In so doing he is acknowledging the complex interplay located between the boundaries of the system and the individual. It is clear from this study that skilled use of an MSE will only occur when attention to mediating factors goes beyond the simply technical and relates to values that an individual carries with them. In this respect, Bowlby's Attachment Theory (Bowlby, 1969) offers a theoretical framework for considering the dynamics involved. There is also a subsequent need to recognize that such values are, in part, culturally fashioned and services seeking to implement such therapy need to realize that investment goes beyond its provision. Support is gained from Bowe and Loveday (1995), who argue that new practices need to be reflected in the policies and procedures of an organization if change is to be meaningful. Consideration therefore needs to be given as to whether the inclusion of a facility such as the MSE aligns with the care environment's operational philosophy and whether steps need to be taken to avoid its presence being tokenistic.

It seems reasonable to extrapolate and make recommendations that could usefully apply to other settings that aim to provide MSEs. Their provision would appear best provided alongside an integrated strategy of education and guidance that accommodates new staff as well as allowing for updates and feedback from staff that use the facility. Factors were identified which lead one to contemplate the nature of the person best suited to carry out such an activity. The extent to which an individual felt comfortable and

the extent to which their self-concept was challenged by virtue of engaging in a play-like activity appeared important. Responding to such a finding lends itself to two options. First, one could argue that the provision of such activity is a necessary and important facet of care and, as a consequence, carers need to be equipped with the necessary skills and attributes to undertake it. This line of thought would lead to recommendations regarding selection and recruitment.

The second, and favoured response is to acknowledge the complexities and challenges associated with such levels of interaction. Subsequent to this perspective would be an emphasis on the promotion and development of skill acquisition in staff through processes of role modelling, education and experiential learning. To this end, it is recommended that where MSEs are established, a local 'champion' be identified who would be equipped with the attributes thus far identified, be comfortable in the use of such an environment and act as a role model for other staff seeking to gain such skills. Such an approach would reinforce the organizational authority attached to such a therapy.

References

- Ashby, M., Lindsay, W., Pitcaithly, D., Broxholme, S., & Geelen, N. (1995). Snoezelen: its effects on concentration and responsiveness in people with profound multiple handicaps. *British Journal of Occupational Therapy*, 58, 303–307.
- Baker, R., Bell, S., Baker, E., Gibson, S., Holloway, J., Pearce, R., et al. (2001). A randomised controlled trial of the effects of multi-sensory stimulation (MSS) for people with dementia. *British Journal of Clinical Psychology*, 40, 81–96.
- Barker, P. (1996). Questionnaires in Cormack. In D. Cormack (Ed.), *The Research Process in Nursing* (pp. 236–249). London: Blackwell Science.
- Benson, S. (1994). Sniff and doze therapy. *Journal of Dementia Care*, 2, 12–14.
- Bowe, B., & Loveday, B. (1995). Strategies for training and organisational change. In T. Kitwood and S. Benson (Eds.), *The New Culture of Dementia Care*. London: Hawker Publications.
- Bowlby, J. (1969). *Attachment and loss: vol.1: attachment and loss*. London: Hogarth Press and the Institute of Psycho-Analysis.
- Brechin, A. (2000). The challenge of caring relationships. In A. Brechin, H. Brown & M.A. Eby (Eds.), *Clinical practice in health and social care* (pp. 141–163). London: Sage.
- Buber, M. (1937). *I and thou*. English Translation by R. Gregor Smith (first German edition 1923). Edinburgh: Clark.
- Cantley, C. (2001). Understanding people in organizations. In C. Cantley (Ed.), *A handbook of dementia care* (pp. 220–239). Buckingham: Open University Press.
- Carr, W., & Kemmis, S. (1986). *Becoming critical: education, knowledge and action research*. London: The Falmer Press.
- Clarke, C.C. (2001). Understanding practice development. In C. Cantley (Ed.), *A handbook of dementia care* (pp. 93–108). Buckingham: Open University Press.
- Cox, S. (2001). Developing quality in services. In C. Cantley (Ed.), *A handbook of dementia care* (pp. 258–277). Buckingham: Open University Press.

- Dick, B. (1993). You want to do an action research thesis? Retrieved 21 May 2002 from <http://www.scu.edu.au/schools/gcm/ar/art/arthesis.html>
- Doble, D., Goldie, C., & Kewell, C. (1997, September). The white approach. *Nursing Times*, 88(40), 36–37.
- Dowling, Z., Baker, R., Wareing, L., & Assey, J. (1997). Lights, sound, and special effects? *Journal of Dementia Care*, 5, 16–18.
- Ehrenfeld, M. (1995). The therapeutic use of dolls. *Perspectives in Psychiatric Care*, 31, 21–22.
- Ellis, J., & Thorn, T. (2000). Sensory stimulation: where do we go from here? *Journal of Dementia Care*, 8, 33–37.
- Fopma-Loy, J., & Austin, J.K. (1993). An attributional analysis of formal care-givers perceptions of agitated behaviours of a resident with Alzheimer's disease. *Archives of Psychiatric Nursing*, 7(4), 217–225.
- Fopma-Loy, J., & Austin, J.K. (1997). Application of an attribution-affect-action model of care-giving behaviour. *Archives of Psychiatric Nursing*, 11(4), 210–217.
- Garnham Hooper, L. (1995). Multisensory integration or separation? [letter]. *Therapy Weekly*, 22, 5.
- Gilloran, A., & Downs, M. (1997). Issues of staffing and therapeutic care. In S. Hunter (Ed.), *Dementia: challenges and new directions: research highlights in social work 31* (pp. 165–180). London and Bristol: Jessica Kingsley.
- Good, V. (2001). Developing service organizations. In C. Cantley (Ed.), *A handbook of dementia care* (pp. 240–257). Buckingham: Open University Press.
- Haggar, L. (1994). A short training package for care staff using Snoezelen environments with profoundly and multiply disabled clients: design, implementation and evaluation. In R. Hutchinson & J. Kewin (Eds.), *Sensations and disability: sensory environments for leisure, Snoezelen, education and therapy* (pp. 49–87). Chesterfield: Rompa.
- Hart, E., & Bond, M. (1995). *Action research for health and social care*. Milton Keynes: Open University Press.
- Harvey, J.H., & Weary, G. (1981). *Perspectives on Attribution Processes*. Dubuque, IO: W.C. Brown.
- Holter, I.M., & Schwartz-Barcott, D. (1993). Action research: what is it? how has it been used and how can it be used in nursing? *Journal of Advanced Nursing*, 18, 298–304.
- Hope, K.W. (1998). The effects of multi-sensory environments on older people with dementia. *Journal of Psychiatric and Mental Health Nursing*, 5, 377–385.
- Hope K.W. (2001). The utilisation of a multi-sensory environment as an adjunct to caring for older people with dementia: an action research study into the development of its clinical application [PhD thesis]. Manchester: University of Manchester.
- Howard, S., & Wareing, L.A. (1995). Good vibrations [letter]. *Therapy Weekly*, 22, 5.
- Hulsege, J., & Verheul, A. (1986). *Snoezelen: another world*. Chesterfield: Rompa.
- Hutchinson, R., & Haggar, L. (1994). The development and evaluation of a Snoezelen leisure resource for people with severe multiple disability. In R. Hutchinson & J. Kewin (Eds.), *Sensations and disability: sensory environments for leisure, Snoezelen, education and therapy* (pp. 18–48). Chesterfield: Rompa.
- Johnson, A. (1998). All play and no work? Take a fresh look at activities. *Journal of Dementia Care*, 6, 26–27.
- Kelley, H.H. (1967). Attribution theory in social psychology. In D. Levin (Ed.),

- Nebraska symposium on motivation (pp. 192–238). Lincoln, NE: University of Nebraska Press.
- Kelley, H.H. (1973). The processes of causal attribution. *American Psychologist*, 28, 107–128.
- Kewin, J. (1994). Snoezelen: the reason and the method. In R. Hutchinson & J. Kewin (Eds.), *Sensations and disability: sensory environments for leisure, Snoezelen, education and therapy* (pp. 6–17). Chesterfield: Rompa.
- Kitwood, T. (1997). The concept of personhood and its relevance for a new culture of dementia care. In B.M.L. Miesen & G.M.M. Jones (Eds.), *Care-giving in dementia: Research and applications*, vol. 2 (pp. 3–13). London: Routledge.
- Kragt, K., Holtkamp, C.C., van Dongen, M.C., van Rossum, E., & Salentijn, C. (1997). The effect of sensory stimulation in the sensory stimulation room on the wellbeing of demented elderly: a cross over trial in residents of the R.C. care centre Bernardus in Amsterdam. *Verpleegkunde*, 12, 227–236.
- Lee-Treweek, G. (1994). Bedroom abuse: the hidden work in a nursing home. *Generations Review*, 4, 2–4.
- Liaschenko, J. (1997). Knowing the patient? In S.E. Thorne & V.E. Hayes (Eds.), *Nursing praxis: knowledge and action* (pp. 23–38). Thousand Oaks, CA: Sage.
- Lindsay, W.R., Pitcaithly, D., Geelen, N., Buntin, L., Broxhole, S., & Ashby, M. (1997). A comparison of the effects of four therapy procedures on concentration and responsiveness in people with profound learning disabilities. *Journal of Intellect and Disability Research*, 41, 201–207.
- Lipsky, M. (1980). *Street level bureaucracy*. New York: Russell Sage Foundation.
- Long, A.P., & Haig, L. (1992). How do clients benefit from Snoezelen? An exploratory study. *British Journal of Occupational Therapy*, 55, 103–106.
- MacDonald, C. (2002). Back to the real sensory world our 'care' has taken away. *Journal of Dementia Care* 10(1), 33–36.
- McCarthy, A. (1995). Do sensory environments fail people? [letter]. *Therapy Weekly*, 22, 5.
- Meyer, J., & Batehup, L. (1997). Action research in health care practice: nature, present concerns and future possibilities. *Nursing Times Research*, 2, 175–184.
- Miesen, B.M.L. (1999) *Dementia in close up*. London: Routledge.
- Moffat, N., Barker, P., Pinkney, L., Garside, M., & Freeman, C. (1993). *Snoezelen: an experience for older people with dementia*. Chesterfield: Rompa.
- Morison, M., & Moir, J. (1998). The role of computer software in the analysis of qualitative data: efficient clerk, research assistant or trojan horse? *Journal of Advanced Nursing*, 28, 106–116.
- Morrisey, M., & Biela, C. (1997). Snoezelen: benefits for nursing older clients. *Nursing Standard*, 12, 38–40.
- Mount, H., & Cavet, J. (1995). Multi-sensory environments: an exploration of their potential for young people with profound and multiple learning disabilities. *British Journal of Special Education*, 22, 52–55.
- Murphy, E., Dingwall, R., Greatbach, D., Parker, S., & Watson, P. (1998). Qualitative research methods in health technology assessment: a review of the literature. *Health Technology Assessment*, 2(16).
- Nay, R. (1998). Contradictions between perceptions and practices of caring in long-term care of elderly people. *Journal of Clinical Nursing*, 7, 401–408.
- NHS and Community Care Act (1990). London: HMSO.
- Orr, R. (1993). Life beyond the room. *Eye Contact*, 25–26.

- Perrin, T., & May, H. (2000). *Wellbeing in dementia*. London: Churchill Livingstone.
- Pinkney, L. (1995). A stimulating debate [letter]. *Therapy Weekly*, 22, 5.
- Pinkney, L., & Barker, P. (1994). Snoezelen: an evaluation of an environment used by people who are elderly and confused. In R. Hutchinson & J. Kewin (Eds.), *Sensations and disability: sensory environments for leisure, Snoezelen, education and therapy* (pp. 172–183). Chesterfield: Rompa.
- Pulsford, D., Rushforth, D., & Connor, I. (2000). Woodlands therapy: an ethnographic analysis of a small group therapeutic activity for people with moderate or severe dementia. *Journal of Advanced Nursing*, 32, 650–657.
- Sandelowski, M. (1995). Qualitative analysis: what it is and how to begin. *Research in Nursing and Health*, 18, 371–375.
- Shapiro, M., Parush, S., Green, M., & Roth, D. (1997). The efficacy of the ‘Snoezelen’ in the management of children with mental retardation who exhibit maladaptive behaviours. *The British Journal of Developmental Disabilities*, 43, 140–155.
- Spaull, D., & Leach, D. (1998). An evaluation of the effects of sensory stimulation with people who have dementia. *Behavioural and Cognitive Psychotherapy*, 26, 77–86.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Thompson, S.B.N., & Martin, S. (1994). Making sense of multi-sensory rooms for people with learning disabilities. *British Journal of Occupational Therapy*, 57, 341–344.
- Wareing, L. (1995). Let patients take the lead [letter]. *Therapy Weekly*, 22, 5.
- Waterman, H., Tillen, D., Dickson, R., & de Konig, K. (2001). Action research: a systematic review and guidance for assessment. *Health Technology Assessment*, 23(5).
- Weiner, B. (1992). *Human Motivation: Metaphors, theories and research*. Newbury Park, CA: Sage.
- Withers, P.S., & Ensum, I. (1995). Successful treatment of severe self injury incorporating the use of DRO, a Snoezelen room and orientation cues. *British Journal of Learning Disabilities*, 23, 164–167.

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