MULTI-SENSORY THERAPY IN PSYCHIATRIC CARE

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WHAT IS MULTI-SENSORY THERAPY?

Multi-sensory therapy is an activity which usually takes place in a dedicated room in which patients experience a range of unpatterned visual, auditory, olfactory and tactile stimuli (Baker et al., 1997). These rooms are designed to create a feeling of comfort and safety, where the individual can relax, explore and enjoy their surroundings.

Multi-sensory environments are varied in their appearance and what equipment they contain, particularly if designed to suit the needs of a specific client group. Commonly it is a white or pastel-coloured room, which has blacked-out windows - this excludes extraneous light and the pale walls optimise the projected light effects. The seating and flooring in particular will depend upon the type of individuals who will be using the room. Seating may include bean bags or specialised chairs or beds. The floor-covering may be cushioned or textured, or even have lights or pressure sensitive pads incorporated into it. Pieces of equipment that are common to many multi-sensory environments include: a mirror ball and coloured spotlights (which project moving coloured shapes around the room), a projector (which projects moving abstract or reminiscent images onto the walls), fibre-optic sprays or curtains (which change colour and can be draped over or held by patients), bubble-tubes (a moving stream of bubbles in an illuminated tube of water, which also gives a sensation of vibration when touched), a music system (to play restful or favourite music), an aromatherapy diffuser, panels of interactive knobs and switches that trigger sounds or lights when activated and a variety of hand-held objects that offer particular tactile or visual sensations to the patient. Staff may also choose to take in samples of food for patients to smell and taste. Many multi-sensory
environments have remote control devices which enable the patients to control the equipment themselves. Other examples of multi-sensory environments would be soft-play areas, ball pools or specialised spa pools.

Box 1 here

In this way multi-sensory therapy provides stimulation via the senses of touch, sight, hearing, smell and taste as well as providing vestibular and proprioceptive stimulation, as the patient moves about the room exploring the equipment. Its aim is to be a relaxing activity, designed “to create a feeling of safety, novelty and stimulation which is under the user’s control” (Ashby et al., 1995), and in which there are no expectations for performance.

Box 2 here

The History of multi-sensory therapy

Multi-sensory therapy is a relatively new intervention which is closely related to the ideas behind sensory stimulation therapy. It is a concept that originated in the 1960s in the Netherlands in the field of learning disabilities, first described in the UK by Hulsegge and Verheul (1987). Early work in this field called this intervention ‘Snoezelen’ which is a Dutch word, derived from an amalgamation of the verbs meaning ‘to explore’ and ‘to relax’. The term ‘Snoezelen’ remains in common usage although the word has now been registered as a trademark by a company which supplies equipment for multi-sensory environments.

It is difficult to find recreational activities that are enjoyable and age-appropriate for people with learning disabilities. Many conventional therapies from other fields of care are unsuitable for those with severe and multiple physical and mental limitations because they
place expectations on the patient to attempt and achieve something potentially beyond their abilities. In addition, people with severe and multiple handicaps often experience very limited psychological and sensory stimulation, particularly in institutional care, and have a limited degree of control and choice in all aspects of their lives. Multi-sensory therapy was developed as a leisure resource for people with learning disabilities and designed to be both a relaxing and a stimulating environment which is failure-free (because there is no specific task to be completed, nor goal to achieve) and in which an individual can choose, control and explore the stimuli around them.

*Figure 2 here*

Recently the use of multi-sensory therapy has extended throughout the world and into other areas of care such as dementia care, paediatrics, adult psychiatry, maternity, and the management of chronic pain. The prevalence of this type of facility in the UK is hard to estimate as they are increasingly available both within and outside mental health facilities, for example in community facilities and residential homes. In addition many places have portable pieces of equipment usually found in a dedicated multi-sensory environment which they can use anywhere in the care environment (e.g. take to the bedside) or incorporate aspects of the philosophy of multi-sensory therapy into the entire environment.

*Box 3 here*

In fields of care other than learning disabilities, dementia care and chronic pain there have been anecdotal accounts of the use of multi-sensory therapy, but as yet (to our knowledge) no empirical research has been published. The remainder of this article therefore concentrates on those areas for which published evidence exists.
WHAT ARE THE REPORTED BENEFITS OF MULTI-SENSORY THERAPY?

Learning disabilities

Originally multi-sensory therapy was considered as a useful leisure and recreation facility for patients with learning disabilities, but increasingly claims are being made as to the therapeutic benefits of this intervention both in learning disabilities and in other health care fields. However valid empirical research in this area is limited and plagued with methodological problems such as the absence of a control condition, small numbers of subjects, heterogeneous samples and difficulty measuring relevant outcomes.

Initial research carried out in learning disabilities suggests that there may be many ways in which people may benefit from multi-sensory therapy. Studies have varied in the measures that they have used to assess the effects of multi-sensory therapy sessions, but in summary the benefits which have been reported include: positive changes in behaviour (Hutchinson and Haggar, 1991; Long and Haig, 1992) improved task concentration (Ashby et al., 1995; Lindsay et al., 1997), an increase in a variety of skills which include awareness of self, social interaction behaviours, communication, exploration and manipulation of stimuli (Houghton et al., 1998), relaxation (Slevin and McClelland, 1999) and the reduction in stereotypic self-stimulatory behaviours and an increase in adaptive behaviours, such as exploratory behaviour or initiating contact with others (Shapiro et al., 1997). However out of all the above studies only three included a control condition. Two of these reported positive benefits (reduction of stereotypic self-stimulatory behaviour / increased concentration) of multi-sensory therapy sessions over the control intervention, but one (Martin et al., 1998) concluded that they could not confirm that multi-sensory therapy had “any effects beyond those that could be ascribed to the social interaction between the participant and the enabler”. This research though, did
rely on measures which took place a week following the end of the interventions and so may have failed to demonstrate short-term changes in behaviour.

Box 4 here

In addition to the possible benefits in the mood and behaviour of patients, many authors have also reported that multi-sensory therapy promotes a close therapeutic relationship and ‘rapport’ between the patient and the carer/staff member who participates in the session with them. It is often beneficial for the carer to share the experience of a non-dependant non-caregiving activity with the patient. Through spending time in the multi-sensory therapy environment with a patient the carer, or staff member, can learn to recognise the signals given by even the most impaired individual, that help them to interpret how they are feeling and what their preferences are - this knowledge can assist their care of that patient outside the multi-sensory environment. It has also been suggested that the experience of doing something positive and spending quality time with a patient serves to increase staff morale and reduce staff burn-out (Morrissey and Biela, 1997). Multi-sensory therapy provides an opportunity for carers to focus on the preferences of the patient and legitimises spending quality time with them, which has a positive effect on their relationship with the patient.

More research is needed to establish and evaluate the benefits that multi-sensory therapy may have to offer for people with learning disabilities. Existing research is promising, and tends to support the strong feelings and anecdotal evidence from care professionals in the field who describe the positive results they have seen. However, valid empirical evidence is lacking, and although provision of multi-sensory therapy facilities is fast becoming standard in learning disability care units throughout the UK, there remains a need to establish a body of rigorous research to help us understand it’s effects and justify it’s widespread use (Mount and
The concept of multi-sensory therapy does have its opponents, who argue that it serves to perpetuate the segregation of people with learning disabilities from normal experiences and sensations, and that keeping them in specialist units and environments goes against the principals of ‘normalisation’ (Whittaker, 1992). Conversely others argue that multi-sensory therapy is in keeping with the concept of ‘normalisation’ in that it provides access to an appropriate leisure activity for the disabled and is an activity which can be enjoyed equally by people with or without disabilities (Haggar and Hutchinson, 1991; Cunningham et al., 1991).

**Dementia care**

Various published research and anecdotal reports have suggested that multi-sensory therapy can have a positive effect on patients with dementia and related behaviour problems. However, as in the field of learning disabilities, valid empirical research in this area is limited due to studies that lack control conditions and/or have small numbers of subjects. This research has indicated that multi-sensory therapy may have a positive effect on dementia sufferers’ mood, in terms of an increase in observers’ ratings of happiness, enjoyment, relaxation, and a reduction in sadness, fear and boredom (for example Moffat et al, 1993; Pinkney, 1997; Baker et al, 1998). These and other studies have also indicated that multi-sensory therapy may increase patients’ attentiveness to their environment (Moffatt et al, 1993; Spaull et al, 1998; Baker et al, 1998), increase appropriate communication (Baker et al, 1998) and reduce the occurrence of socially disturbed and challenging behaviour (Spaull et al, 1998; Kragt et al, 1997). However out of all the above studies only two included an appropriate control condition and only one included a suitable number of subjects (Baker et al, 1998). Baker et al concluded that multi-sensory therapy is particularly appropriate for individuals with moderate or severe dementia, where more structured approaches may fail,
and reported that the staff involved felt it promotes relaxation in agitated patients and stimulates those who are unresponsive.

As in learning disabilities, many of the above studies refer to the positive effect multi-sensory therapy can have on staff morale and their relationship with the patients they care for, by providing the opportunity to share a non-instrumental activity and gain insight into the individual for whom they care.

**Box 5 here**

**Pain management**

There is much published research into the use of multi-sensory therapy in the management of chronic pain (e.g. Schofield, 2000) where it has been shown to reduce recorded pain levels, reduce depression and disability of functioning (e.g. physical, psychosocial, sleep) and to assist in coping for sufferers.

**WHAT ARE THE POSSIBLE DRAWBACKS OF MULTI-SENSORY THERAPY?**

It is apparent that not all individuals like or benefit from multi-sensory therapy, and also that an individual’s response can vary over different occasions. For some, the stimulating environment may have the effect of increasing the existing level of agitation, whilst for others, or for the same individual on a different occasion, it may have a calming effect. Some patients find the unusual visual effects confusing and can become distressed. However, the skill of the therapist in introducing the patient to the multi-sensory environment in the correct manner appears to be an important factor in the response of a patient to multi-sensory therapy, but by no means guarantees a positive response. The therapist must be sensitive to
the patient’s reaction to the room on each occasion, and take the appropriate measures to ensure that the person does not become distressed.

**HOW DOES MULTI-SENSORY THERAPY WORK?**

There are varying theories accounting for how and why multi-sensory therapy can have positive effects for people with multiple handicaps.

**Sensory deprivation/stimulation** – Research carried out in the sixties showed that prolonged or frequent restriction of appropriate and understandable stimulation for a person can lead to negative psychological outcomes (Zuckerman, 1964). It is not only the amount of stimulation that is important, but also variation in stimulation (i.e. monotonous unchanging stimulation can be as negative as no stimulation at all). Many care settings in which people with dementia or learning disabilities spend much of their time can be environments that are unstimulating or offer no variation in stimulation. Physical, sensory and cognitive impairments will further reduce the amount of meaningful stimulation an individual will receive. Impaired cognitive ability also restricts their ability to make sense of what stimulation they do receive. Such deprivation of meaningful sensations can lead to negative outcomes such as anxiety, stress, depression or withdrawal, reduced motivation, or agitation and disturbed behaviour. Specific stimulation of the primary senses in an environment which excludes all extraneous stimulation, makes perception and interpretation of those sensations easier for patients and alleviates the effects of this deprivation. The stimulation can then be adapted according to the individual’s responses to it, thus making the experience an increasingly appropriate and positive one.

**Demand-free environment** – Interpretation of a complex environment makes demands on an individual with sensory and cognitive impairments, as do many recreational activities. Baker
et al (1998) propose that multi-sensory therapy requires no memory or cognitive reasoning ability, and so removes demands upon an individual to understand what they are experiencing, thus reducing the tendency for them to feel confused and to withdraw. In addition the stimuli presented in multi-sensory therapy are unpatterned and therefore are less demanding of attention and cognitive processing. This therefore reduces the demands and stress individuals are under and encourages more positive and appropriate behaviour.

**Learned helplessness** - Individuals with severe and multiple disabilities often have little or limited opportunity to exert control over the environment around them. As a result of this experience they become to feel helpless, loose confidence that they can have any influence on their environment (even when they can exert some level of control) and they become withdrawn and apathetic. In effect they learn to be more helpless than they actually are due to their disabilities. The multi-sensory therapy environment is safe and failure-free. An individual is given the opportunity to exert and experience control over their environment. This may be through direct interaction with the equipment, through use of a specially adapted remote control or by communicating their preferences to an accompanying staff member. Through this experience patients are given the feeling of independence and choice. Many clinicians feel that this aspect of multi-sensory therapy is an important aspect of how multi-sensory therapy works.

**Social contact** - There is a debate as to how much it is the intervention itself that brings about the positive changes in patients and how much this may be attributable to the change that the multi-sensory therapy has on the relationship between staff and the patient (Mount and Cavet, 1995). In hospital or other care environments elderly patients often receive very little staff-patient interaction, particularly in terms of social activities and prolonged informal conversations (Armstrong-Esther *et al.*, 1994). Multi-sensory therapy may legitimise
informal non-instrumental contact between staff and patients, encouraging and enabling staff to increase the amount of time they spend interacting with their patients (Ellis and Thorn, 2000). The multi-sensory therapy philosophy also makes staff reconsider and be aware of ways to communicate with the patient as an individual, and this engenders feelings of well-being in both the patient and the staff (Hope, 1996). Multi-sensory therapy therefore may influence the way staff spend time with patients, as well as their awareness of ways to communicate and their relationship with them.

Whatever the mechanism by which multi-sensory therapy is helpful it is agreed that it is essential for all individuals to have access to appropriate pleasurable experiences which are under the individual’s control, and that this is essential to a person’s well-being. Multi-sensory therapy enables carers to cater for this need in a way that is appropriate for clients who have cognitive, physical and perceptual impairments. The enabling, non-directive, non-goal-orientated aspects of multi-sensory therapy are also important to encourage an individual’s engagement in and awareness of their surroundings, to promote motivation and feelings of control and choice which may be limited in many other aspects of their lives.

PRACTICAL CONSIDERATIONS REGARDING THE USE OF MULTI-SENSORY THERAPY

Many articles in the occupational therapy and nursing literature refer to the importance of many practical issues relating to the use of multi-sensory therapy with patients who have learning disabilities or dementia. For example, there are problems surrounding the issue of gaining consent to participate from such patients when it is difficult to explain what the multi-sensory environment is like. The use of photographs can be helpful in explaining the concept to them, and gentle introduction of an individual to the room (e.g. not having all the
equipment turned on at once) combined with sensitive observation of a patient’s reactions can ensure they are willing and open to the experience.

It is imperative that any staff member who accompanies a patient to the multi-sensory environment is familiar with the patient, their background, health and perceptual problems, and familiar with the ways in which they express their discomfort and preferences. There may be issues for an individual regarding gender, their cultural background, and their openness to therapeutic and non-therapeutic touch (invasion of personal space). With this knowledge staff can facilitate the session in a way that is appropriate for the individual, sensitive to their boundaries, and responsive to their preferences.

Planning and equipping a multi-sensory environment needs to be done with careful consideration of the needs of the patient group for whom it is designed. Consideration also needs to be given to health and safety issues, and to staff training in the use of the equipment and how to facilitate sessions. Problems which have been highlighted which can effect the use of multi-sensory environments in some units include: limited staff availability to accompany patients to the room, the location of the room in relation to the care environment (having to leave the usual care environment, or the distance they have to travel, distresses the patient) and staff being unclear about which patients are most likely to benefit.

**SUMMARY**

Given the ever-increasing popularity of this new activity, it is important that further systematic research is undertaken to provide evidence regarding the efficacy of multi-sensory therapy in all of the fields of care in which it is currently being used. It remains to be established whether conventional relaxation techniques or other approaches (such as enhancing the sensory experiences of the every-day environment) could be as effective at
achieving the same benefits. The reported benefit that multi-sensory therapy may be useful in reducing behavioural problems has important implications in view of the limited efficacy of pharmacological treatment for these symptoms (Schneider, 1996), which have been shown to cause the most distress in carers of dementia sufferers and contribute greatly to the decision to place patients in long-term residential care.

Some people feel that the current lack of empirical evidence fails to justify the widespread use and expense of these facilities, and there is a clear need to prove that patients do benefit from multi-sensory therapy and are not just passive recipients of the intervention (Woodrow, 1998). It is perhaps worth noting, however, that many interventions such as reminiscence, validation therapy and reality orientation, which are long established and widely–used in dementia care, also lack a background of rigorous research evidence.

At present the research literature into the relative merits of multi-sensory therapy may not be substantial, but it does indicate support for the substantial anecdotal evidence which claims that multi-sensory therapy is an effective and appropriate therapeutic intervention for people in mental health care.

REFERENCES


MCQs

1. Multi-sensory environments:
   a. are strictly standardised to suit a particular client group
   b. provide visual, olfactory and proprioceptive stimuli
   c. aim to encourage patients to explore
   d. aim to create a relaxing atmosphere
   e. the equipment is always under the therapist’s control

2. In the research carried out in the learning disabilities field, multi-sensory therapy has been reported to have a positive effect on:
   a. task concentration
   b. communication
   c. apraxia
   d. self-stimulatory behaviour
   e. relaxation

3. The therapeutic benefits of multi-sensory therapy are possibly related to:
   a. being task orientated, and so encouraging a higher level of functioning
   b. the patient having a sense of being in control of their environment
   c. giving stimulation to the all the senses simultaneously
   d. the stimuli being unpatterned in nature
   e. exclusion of extraneous stimuli
4. The research carried out in dementia care has indicated that multi-sensory therapy can improve:
   a. mood
   b. orientation in time
   c. relaxation
   d. staff morale
   e. mobility

5. In multi-sensory therapy:
   a. knowledge of the patient is important
   b. it is not necessary to gain a patient’s consent
   c. anyone can accompany a patient to the multi-sensory environment – no training is required
   d. the patient must be able to communicate verbally
   e. all patients will benefit

**MCQ answers**

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Box 1

**Multi-sensory therapy provides:**

- Stimulation
  - visual
  - aural
  - tactile
  - olfactory
  - gustatory
  - proprioceptive

- Control and choice
Box 2

**Multi-sensory therapy is:**

Relaxing

Stimulating

Failure-free

Non-directive

Responsive to the individual

Enabling

Rapport-building
Box 3

**Multi-sensory therapy is becoming widely used in many fields of care:**

Adult learning disabilities

Dementia care

Children with special needs

Paediatrics

Maternity

Pain management

Adult psychiatry

Stroke and traumatic brain injury
Box 4

**Reported benefits of multi-sensory therapy in learning disabilities**

Improved task concentration

Improved awareness of self

Increase in social interaction and communication

Increase in exploration and manipulation of stimuli

Increase in adaptive behaviours

Reduction in stereotypic self-stimulatory behaviours

Improved staff morale
Box 5

**Reported benefits of multi-sensory therapy in dementia care**

Increase in happiness, enjoyment and relaxation

Reduction in sadness and fear

Increased attentiveness to environment

Increased appropriate communication

Reduced disturbed behaviour

Improved staff morale