

Using sensory stories for individuals with dementia

People with dementia are prone to sensory deprivation, but symptoms like irritability and confusion may be reduced by using multisensory life stories. **Rebecca Leighton, Coralie Oddy and Joanna Grace** describe two successful approaches to sensory life story work

A 'sensory story' is a concise narrative in which each section of the text is partnered with a relevant sensory experience, each story typically targeting a broad range of senses. Story experiencers may engage with the narrative through the text, the stimuli, or both; no part has dominance. Individuals with limited understanding of language can therefore be included in storytelling and its benefits for well-being and cognition (Grace 2014; Lacey 2006).

Sensory perceptions are key to memory formation (Bogdashina 2003) and repeating a sensory experience reinforces neural pathways (Grace 2014; Longhorn 2011). Accordingly, when sensory stories are told consistently over time, listeners' responses increase (Brug *et al* 2012; PAMIS 2002, 2006, 2010; Penne *et al* 2012). Sensory stories were originally created to support individuals with profound disabilities (Deonarin 2010; Fuller 2013; Grove 1998; Lacey 2006; PAMIS 2002; Park 2004; Taylor 2006; Young & Lambe 2011) and have since been used effectively with individuals with a range of needs. This paper explores their application in the field of dementia.

Narrative and sensory interventions

Sensory loss associated with ageing is exacerbated by dementia (Bakker 2003). Individuals with dementia are especially vulnerable to sensory deprivation, as difficulties with communication and mobility create barriers to accessing desired activities (Baker *et al* 2003). Symptoms of sensory deprivation – irritability, confusion, disorientation, lethargy and hallucinations – are common in later stage dementia (Collier 2007). Providing appropriate sensory stimulation is therefore crucial (Baker *et al* 2003).

Though common in learning disability services, the use of sensory stories in dementia care is not reported in the literature and appears to be a novel approach. Other narrative and sensory interventions are used with both populations:

- Life story work benefits individuals with dementia and/or learning disability and their carers (Hewitt 2006; Kindell *et al* 2014; McKeown *et al* 2015).

- 'Multisensory prompts for communication' support individuals with learning disability and dementia to transition between activities and experience reduced anxiety (Johnson & Elliot 2006, 2008).

- Multisensory environments, frequently used

with individuals with profound and multiple learning disabilities (PMLD), became popular in dementia care in the 1990s (Baker *et al* 2003; Hope & Waterman 2004).

Individuals with PMLD and dementia are certainly not a homogeneous group, but this overlap in approaches reflects the fact that both populations are vulnerable to sensory deprivation (Baker *et al* 2003; Bauer *et al* 2015; Fowler 2007; Grace 2014) and have an increased need for non-verbal communication (Ellis & Astell 2008; Mansell 2010; Mencap 2014). The parallels suggest that 'what works' in sensory storytelling for people with PMLD could be beneficial in dementia. Through exploring this in practice, we have developed two approaches: personalised sensory life stories and group sensory storytelling.

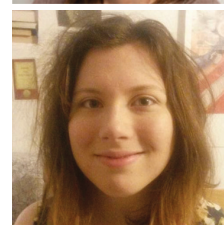
Sensory life stories

Traditional life stories are usually books (Kindell *et al* 2014; McKeown *et al* 2006) but other formats exist. They may incorporate photos, documents, objects or music (Hewitt 2006) and are thus experienced via multiple senses. However, they may "... lack a multisensory and embodied dimension that requires further exploration in research and practice" (Kindell *et al* 2014 p158). So, since 2013, we have had a multisensory focus, implementing sensory life stories with individuals with dementia.

In the format we have created (box 1, p18), between eight and 10 key events are drawn from a traditional life story and each is recreated as a concise sentence with an accompanying sensory experience. Chronological order is maintained. In a second format (box 2, p18), one specific memory (perhaps a favourite, memorable event) is retold in eight-10 sentence/stimuli pairs. Reggie*, for example, has a story about how his passion for art began with winning a school competition. In both cases, an identity-reaffirming narrative is told through sensory experiences.

Most families have chosen to start with a traditional life story, from which one or more sensory stories are then developed. But where the dementia is more advanced, families may choose to start with the sensory format, given its non-verbal emphasis.

Involving people with dementia in life story work is complex (McKeown *et al* 2015). The



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Above and next page:
Coralie Oddy leads a group sensory storytelling session at the Centre for Wildlife Gardening in south-east London

sensory approach may result in a genuinely joint endeavour between individuals with the condition and practitioners or carers to identify appropriate sensory experiences as ways other than verbal communication to create sensory stories. Even in the later stages, the person's responses to different stimuli may facilitate 'co-production' of this kind. Harry* and his wife worked together to identify smells that triggered holiday memories. In exploring sun creams, they discovered that massaging his arms with the cream increased his responses – the multisensory, tactile element and the physical actions associated with the event were a stronger connection than the smell alone.

The multisensory narrative may retain its impact through the various stages of dementia as verbal understanding decreases. Marian* and her husband paired a piece of music with a sentence about their 1940s dancing. She described him moving his feet upon hearing the music within the story, as he communicated "I remember dancing with you" without words. Perhaps experiencing the music in the context of his life history was important.

Re-telling a sensory life story as dementia progresses should maintain the familiarity and predictability of the stimuli. Marian reads her husband's story to him every morning as part of their routine and believes he feels calmer with this familiar start to each day.

Sensory life stories also empower individuals with dementia to *tell* their stories, because they can be told effectively without relying on words. This may encourage confidence in 'total communication', strategies using multiple modes of communication which value non-speech forms (Jones 2000) and increase communicative effectiveness in people with dementia (Royal College of Speech and Language Therapists 2013). Telling a story creates opportunities for connecting with others. For example, Mary* (who

Box 1. Sentences and sensory experiences: a story across the lifespan

"We got married in 1947 and I wore my Royal Navy uniform" (visual stimulus: blue fabric with three white stripes).

"At gymnastics we had to put chalk dust on our hands to use the bars" (tactile stimulus: chalk dust on hands).

created a story about her career in the post office) wished she had had her story when her children were young, so that she might have shared her memories in a way she felt would interest them. This reflection gave her courage to tell it to her grandchildren despite significant difficulties using verbal communication.

Finally, Edward's* wife viewed the process as something she could do to help. The shared goal of identifying stimuli provided a purposeful focus. Sensory life stories can empower the individual with dementia and the people around them.

Group sensory storytelling

Sensory stories can be implemented as a group activity in dementia care settings. Such settings generally utilise various group activities and multisensory approaches, but sensory storytelling might address some of the shortcomings of existing approaches.

Multisensory environments can promote well-being by offering opportunities to communicate through the senses rather than language (Pagliano 2008) but they may fail to offer appropriate contexts for the sensory experiences, resulting in a lack of satisfaction and under-use (Jakob & Collier 2014). A sensory story on a familiar topic offers both sensory experiences and a meaningful context related to life beyond the care environment.

Social group activities, such as gardening or baking, have sensory elements and reminiscence therapy exploits multiple senses on the basis that sensory stimuli can trigger memories (Schweitzer & Bruce 2008). However, active participation in these activities may be limited for people with more severe dementia. By contrast, experiencing a sensory story does not require active recall of past events (as reminiscence therapy may) or physical and/or verbal participation (as most social group activities do). Furthermore, sensory stories can be tailored to meet the sensory preferences and cognitive skills of the individuals in the group.

The start of an activity session can be disorientating for someone with dementia; for example, they may have to move to a different area and wait for other group members to arrive, which can create anxiety. On the other hand, the repeated use of a sensory story as a predictable part of a reminiscence or activity session could help to build familiarity and reduce anxiety.

A sensory story on a generic topic such as holidays or celebrations may trigger memories for group members and encourage them to share ➤

Box 2. Sentences and sensory experiences: a story of one memory

"Walter copied a caption: 'Fry's chocolate, delicious and nourishing'" (taste / smell stimulus: chocolate on tongue or chocolate lip balm).

"Painting takes Walter into his own little world of concentration and rhythm" (tactile / kinaesthetic stimulus: rhythmical sweeping of soft paintbrush on forearm or paper).

➤ their own stories and have these validated. Indeed, research has shown that simply being included in the storytelling space supports individuals to be braver, more able to cope with experiences that would usually be challenging, and to feel more connected with those who share the space with them (Grace 2014). This may be particularly important for people living in long-term care facilities who become emotionally vulnerable due to losing links to their personal and cultural past (Chaudhury 2003).

Wildlife in the City: a case example

The sensory story *Wildlife in the City* was written for, and shared with, eight residents of a central London care home who have moderate dementia and participate in weekly gardening group sessions. The story was shared at the start of each gardening session, providing structure and promoting understanding of what would take place. Seeing the sensory stimuli laid out became a visual cue for group members as they arrived. For one group member, wandering behaviour at the start of the sessions appeared less marked.

Specific sensory experiences promoted relaxation and the repetition of these experiences increased awareness and attention. The birdsong at the close of the story was played for as long as all group members appeared fully engaged in the experience. During the first session, it was played for around 15 seconds; by the sixth session, it had increased to over a minute. Group members said they found the birdsong "peaceful" and "lovely". Observations suggested they appreciated the opportunity to engage in the present moment without pressure to participate or respond in a particular way.

The content of the story stimulated memories and gave rise to conversation. Group members initiated discussion about the smells and sensations they had liked and disliked, which naturally led into reminiscence and sharing of memories with the group.



This example highlights how group sensory storytelling can provide appropriate, contextual sensory stimulation and structure social group activities. This may support communication, interaction and reminiscence, and reduce experiences of anxiety and isolation.

What next?

Although we have only introduced sensory stories with individuals with dementia on a very small scale, observations and feedback are encouraging and they appear to be one way of providing appropriate sensory stimulation for people with dementia.

However, our clinical experiences over the last three years are insufficient to comment on long-term outcomes and are not representative of the range of settings in which sensory stories could be trialled. Wider use and formal research are required to fully explore the experiences and outcomes of this form of storytelling for people with dementia and their carers. ➤

**Names have been changed*

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Sensory storytelling: points for practice

Whatever approach is taken to sensory storytelling, two considerations are essential: stimulus selection and sensitivity.

Stimulus selection

The choice of stimuli is centrally important; careful, person-specific and dementia-specific selection is key. This choice is not necessarily focused on the progression of sensory development as it might be in supporting individuals with PMLD (although this is a potential outcome which might be explored in research). Rather, it is focused on recall and pre-existing associations, on finding stimuli which are strong memory triggers and which are not distressing or confusing (nor likely to become so as dementia progresses).

Identifying strong memory triggers can be difficult, particularly if the person has limited verbal ability to relate their memories, but thinking creatively tends to get results.

Breaking tasks down is a good starting point – if the person liked baking, explore the sensory elements of each stage of baking (stirring or kneading actions, feel of flour, smell of vanilla essence, taste of icing) and observe their responses.

This type of process revealed, for example, that using a bicycle pump was a great kinaesthetic experience for prompting Shah* to talk about the cycling races he won as a young adult.

An assessment or activity to establish the person's sensory preferences is a wise step, so that the experience is an enjoyable and meaningful one:

- Is the person calmer with firm or light touch?
- Do loud sounds frighten them?
- Do they love sweet tastes?

Occupational therapy assessments are often excellent sources of guidance for selecting personalised sensory stimuli; alternatively, tools may be found in Fowler (2007) and Grace (2014).

Personalising stimuli is of course more challenging in group storytelling, but tweaking the experiences to fit each group member is not insurmountable.

Consideration of general sensory features of dementia is equally important. Progressive neuronal changes affect the way sensory stimuli are processed and experienced (Baker *et al* 2003). For example, mirrors and abstract projected images may be confusing (Hope & Waterman 2004). Smells, on the other hand, are likely to be successful stimuli because they are the only form of sensory information to remain indefinitely once encoded (Johnson & Elliot 2006).

Readers are directed to Jakob & Collier (2014) for further information.

Sensitivity

Sensitivity is essential in all aspects of sensory story work. As in all life story or reminiscence work, there is potential for traumatic memories to arise and the practitioner should be prepared for this.

There is also a need to consider how the rather reductive act of condensing someone's life memories into eight to 10 sentences might be experienced.

Having an example of a sensory story helps to introduce the concept. Great sensitivity is required in discussing likely deterioration in verbal communication and increasing need for more multi-sensory, non-verbal supports. Talking about those abilities that might be maintained through sensory stories (for example, continued potential for sharing memories and connecting with family and friends) is a more positive approach.

Finally, storytelling can be viewed as 'for children' and it can help to focus on sharing stories rather than being told a story.

A 'story tree' can visually record stories that arise during group storytelling sessions and become a talking point for visitors and care-givers.

Sensory stories may not be appropriate for everyone and they are not posited here as a replacement for any existing approach. Rather, they are an addition to the toolbox of approaches that can be used to support people with dementia, chosen where it is clinically indicated and fits with the person's own goals.

Available at: http://fada.kingston.ac.uk/de/MSE_design_in_dementia_care/doc/How%20to%20make%20a%20Sensory%20Room%20for%20people%20With%20dementia.pdf

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