

BRAIN GYM: A CASE STUDY

Ryan Dalton and Bryan Hewson

July 9 2008

Beatrice is a 92 year old widow with a diagnosis of Alzheimer's disease. She came to this residential aged care facility following the closure of the facility where she had previously been living for a number of years. Although a little unsteady on her feet, she is currently ambulant and with supervision, walks without aids. She has short term memory loss and is unable to independently sequence tasks. She is also disoriented to time, place and person.

Beatrice has lost much of her capacity to name things, leading to extreme word finding difficulties. Like many who have such aphasic disorders, she often uses circumlocutions in order to express a word for which she cannot remember. For example, when looking for a handkerchief – “*The white thin thingy for when you know, you know ...*” and then she points to the middle of her face. Her incapacity to sequence tasks appears to be related to her aphasia. Not knowing the names of objects makes it difficult to do anything with them – without knowing the word for an article of clothing such as a “*dress*”, how can she put one on?

Occasionally Beatrice enters into a confused confabulation, constructing a broken story with words missing, replete with incomplete phrases. Frequently she is unable to find a word; yet knowing there should be a word to describe what she is thinking of, she resorts to embolalia – the interjection of meaningless words into her sentences. These fabricated words often have syllabic rhythm around the consonant ‘b’. For example, when attempting to communicate – “*I have to finish my cup of tea first*”, Beatrice says – “*When my babbabaly is done*” – holding her cup and pointing to it with her free hand. In a tragic internal confusion of lost words, symptomatic of the neural tangles of Alzheimer's disease, Beatrice lives in a tower of Babel of her own making.

Occasionally, offering suggestions of words that she may be endeavouring to find is helpful - i.e. “[You mean] *a handkerchief?*” She can be assisted in conversation by using short closed questions or simple statements such as – “*It is cold today?*”; leading to the prompt - “*Do you want a coat?*” However, Beatrice is unable to express the complex trains of thought required for the social conveniences and reassurances of conversation. This leads to frustration and anxiety, which can escalate into verbal or physical aggression towards other residents and those endeavouring to care for her.

When Beatrice first transferred from another facility, her disorientation to time, place and person was extreme. She would be lost all the time. Over a period of five months, staff did become familiar to her, even if she could not recall their names. However, despite continual supervised walking and directing in an attempt to orientate her to a new environment, Beatrice could never find her own way from the dining area back to her room. When out of her room, without supervision she would wander aimlessly, frequently intruding into other residents' rooms. Often enough, this would result in her being told to “*Get out! This is not your room.*”

This inability to find a safe place only heightened the confusion of Beatrice's aphasia and she would become even more anxious, frustrated and upset. In her distressed emotional state, verbal outbursts towards staff and other residents were not uncommon. At or after being at the dinner table, Beatrice could be heard to make remarks to herself such as - "*All those bloody fools there are talking about me. Well, bugger them all!*" And looking around her, with raised voice, Beatrice could still find the words for her isolated emotional predicament - "*And bugger all of you!*" Sometimes, when wandering about lost, she would tearfully say, "*I don't live here. Take me back to the Manor. That is where I should be.*"

A staff member at this facility had undertaken training in Brain Gym specific to aged care with Claire Hocking, Brain Gym Instructor and Educational Kinesiologist *(see end of paper for more details). Brain Gym is the registered trademark for the name given to the 26 specific movements that are part of the Brain Gym and Educational Kinesiology program. Commencing Brain Gym sessions held the promise of enhancing the quality of life and independence of residents. The movements are designed to switch on their brains and body and relax their systems to improve the quality of life including cognitive functioning, mental fitness levels, memory, concentration, vision, hearing, independence and communication skills.

Many research studies have found that Brain Gym is able to reverse some of the symptoms of aging such as a lack of concentration, poor recall, limited thinking patterns and seeming inability to learn new material even in those who have shown some signs of deterioration. Improved cognitive functioning and mental fitness is essential if older people are to maintain independence and control of their lives.

Given her cognitive incapacities and emotional isolation, Beatrice appeared to be a person who might particularly benefit from Brain Gym.

Six months after admittance to this facility, Beatrice started group sessions in Brain Gym. Twice weekly, around 10 residents were in attendance. Beatrice had severe difficulties following the movements being demonstrated by the instructor. Whilst other residents readily picked up on the movements, Beatrice was in a constant state of confusion and unable to mimic the movements being demonstrated before her. For example, the instructor would begin a movement by saying, "Place your left index finger on your nose", and then, "Touch your belly button with the right index finger". Beatrice would place a finger of the left or right hand on her lips, or to her forehead and only occasionally touch her nose, by accident as it were. It appeared that in her aphasia, she could only recall that the 'nose' was somewhere in the facial area of the body. Her other hand would touch somewhere in the general area of the abdomen or chest, with little indication that she could specifically identify her navel. Beatrice would become agitated in group sessions, unable to keep up with the different movements being demonstrated. Calling out, "*This is silly! How stupid!*", Beatrice's behaviour became disruptive for the rest of the group. Despite the instructor's attempts to guide her, after 2 weeks it became apparent that if Brain Gym was to be of any use for Beatrice, she would require more intense 1:1 assistance.

Daily, the instructor came to her room at the same time in the morning. Still requiring assistance to place her hands or fingers to the correct areas of her body, on each occasion, Beatrice was lead through the same routine of Brain Gym exercises. These individual sessions lasted 15-20 minutes. The specific exercises were:

- Brain buttons
- Earth buttons
- Balance buttons
- Space buttons
- Energy yawn
- Cross crawl
- Tracking
- Lazy 8s for eyes
- Hook-ups

Each and every day, the instructor approaches Beatrice and asks, “Do you want to do some Brain Gym?” Due to her short term memory loss, Beatrice invariably responds – “*What’s that?*” Yet with a simple explanation about “Doing some exercises to keep you fit” she willingly joins in. At first, her confusion was little different to that demonstrated in group sessions. But without the presence of a peer group to make her feel inadequate, she did not become overly agitated. With persistence and continual gentle encouragement, the instructor would place her hands to the correct positions and lead her through each specific exercise.

After six months of intensive 1:1 “tuition” Beatrice fell more easily into the flow of the movements and showed signs of learning the skills.

For the first six months of Beatrice living at this facility, she could not find her way back to her room. Subsequently, over a period of three to four months of Brain Gym, if directed to her corridor, she could find her way independently to her room at the far end. As time and the lessons further progressed, she was able to return to her room from the exit of the dining room, without further directions being required. Her emotional state also appeared to be more settled. However, after six months of exercises, the instructor was uncertain as to whether Brain Gym having any real effect on her emotional well-being and cognitive state, or was she simply becoming more familiar and ‘at home’ with a new living environment.

After consultation and discussion with the Lifestyle Coordinator about the ethical ramifications of withdrawing possibly beneficial ‘treatment’, a difficult decision was made to stop daily 1:1 exercises. Remarkably, within three days, Beatrice’s behaviours which were present on admission returned. She recommenced aimless wandering, became emotionally disturbed, was intrusive and verbal outbursts at staff and other residents reappeared. It became immediately apparent that the Brain Gym exercises were having a positive effect on Beatrice’s well-being. Needless to say, the 1:1 exercises recommenced post-haste. Beatrice’s extreme behaviours began to subside almost immediately.

Beatrice continues to be troubled by her aphasia. Her confabulations and embolalia have not ceased. In all likelihood, she will experience further cognitive decline as her Alzheimer’s progresses. For the present time, Brain Gym has brought to Beatrice to a less aggressive and more balanced emotional state. She enjoys the Brain Gym exercises and

appears physically invigorated when each daily session is over. She now has the capacity and improved skills also to be a part of group Brain Gym sessions. Now Beatrice is often observed to be singing – rather than emotionally agitated. She still gets lost on occasion, particularly when she has been in an area of the facility that she does not usually go to. However by decreasing her socially inappropriate behaviours, a significant degree of her isolation has diminished. Beatrice can find her way around with a modicum of insight and security. Brain Gym has allowed Beatrice to become part of this community and helped her find a safe place in a world of confusion.

For more information specific to this case study, please contact
Bryan Hewson bhewson@baptcare.org.au

This case study was conducted at an Aged Care facility in Melbourne, Victoria, Australia.

* Claire Hocking is a fully qualified and registered Educational Kinesiologist and Brain Gym Instructor and has been presenting Brain Gym workshops both nationally and internationally over the past fifteen years. She has used the activities from the 'Brain Gym for Aged Care' workshop in local nursing homes and hostels. Claire also consults privately at her clinic in Lara. Claire has developed this popular workshop to assist diversional therapists, activities officers, wellbeing coordinators, carers and other health professionals to improve the quality of life for the elderly.

Specialty Workshops are available for specific groups. These are designed to meet the needs of each group. Previous workshops have benefited aged and health care workers, students, parents, educators, and other professionals.

For further information on the Brain Gym for Aged Care workshop or to arrange a private consultation, please contact:

Claire Hocking, AKA
Educational Kinesiologist & Brain Gym Instructor
47 Waverley Rd, Lara, Vic 3212
Phone (03) 5282 5985
Fax (03) 5282 8542
Mobile: 041 956 9071
E-mail: claire@wholebrain.com.au
www.wholebrain.com.au

