**Driving to Learn**

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At PMG conference 2018 in Manchester, Dr Lisbeth Nilsson (associated with Lund University, Sweden) was interviewed on stage by Graham Race (from Queen Elizabeth Foundation Trust, Surrey) regarding her development of the Driving to Learn programme, one stream of which aimed to provide powered mobility for people with dementia.

This conversational session started with Lisbeth providing some background to her current work. In 1993 Lisbeth began working with children with profound developmental and cognitive needs – looking at how providing powered mobility could be used as a valid occupational therapy tool as it enables children to learn their environment and develop relationships through mobility; in the same way as a typically developing child.

Lisbeth reflected that as time progressed and the initial Driving to Learn programme was showing signs of success, her professional curiosity led to her wondering whether the same techniques could be used with people with dementia. After all, Lisbeth commented, essentially this is the same barrier at opposing ends of the lifespan – developing cognition at the beginning of life and declining cognition towards the end.

Lisbeth identified that the first barrier in this new strand of work was to identify a population – she worked to forge links with a nursing home in a small village setting. The second and somewhat larger difficulty was which wheelchair to use. Lisbeth stated that it would be too problematic and risky to work with a standard powered chair. Consequently she worked with Swedish wheelchair manufacturer Permobil to develop a learning tool/chair the C300 – TIRO.

The benefits of this chair are that:

* Speed and power are adjusted so that a person with limited understanding and slow reactions can learn, without being afraid or causing damage.
* The seating system is extremely flexible and can easily be adjusted without tools.
* The tray with the joystick mounted in the midline allows support of forearms and use of both hands to use the joystick.
* The addition of a bumper to the front of the chair providing protection from collision for feet.

Lisbeth went on to discuss her method in utilising this tool: taking the tool to the Nursing Home, connecting with the therapy staff working there and trialling with the “easier” residents first. Videos were shown to the conference demonstrating the success of these sessions and Lisbeth shared some of the feedback:

“This was fun”

“This has made a difference”

Discussion was had around this with Lisbeth reflecting that life in a nursing home environment can become very monotonous, even in an environment with lots of planned activities. She commented that any small change or difference to the routine becomes an event – and that the use of this tool was really different which added to the experience of fun and playfulness.

Lisbeth then introduced a case study. S. was a lady with what Lisbeth described as “quite a typical advanced dementia”. S. spent most of her time in her room; she was immobile, incontinent, would often cry and at times would scream out. None of her communication was identifiable, more general vocalisation.

Lisbeth explained how she facilitated her sessions with S.:

* Each session took place in her room – the most familiar environment to S.
* The training chair was placed to the side of her bed (she began over sessions to recognise this)
* Lisbeth would use tactile stimulation of the hands at the start of each session (with the reflection that S. seemed to recognise her from this even if she didn’t know her face)
* Over the sessions Lisbeth began to facilitate S. moving the joystick to control the chair, reducing the amount of facilitation as appropriate.

Lisbeth showed a number of clips, demonstrating how in one session S. developed the ability to control the chair to turn in circles on the spot and then began to use the chair to move backwards and forwards as appropriate, with increasing amounts of control. Over the clips S. engaged increasingly and actually began to use some recognisable vocalisation – telling Lisbeth to “let go” when she was shown trying to help.

During the clips we saw S. collide with her environment in the chair and Lisbeth explained to the group the importance of this as it is crucial to allow a person to learn their environment. Additionally, Lisbeth stated that these collisions stimulate the vestibular system which increases alertness and as a consequence their attention.

Lisbeth finished by explaining that 13 people were involved in this strand of her research over 53 sessions, with S. having the most profound disability. Lisbeth acknowledged that unfortunately as her research came to an end as did the use of powered mobility with the group as sadly the staff did not feel able to progress, but in spite of this Lisbeth considers the project to be a success as although powered mobility did not continue the way in which staff interacted with residents changed.

Lisbeth stated that often for people with dementia, people around them treat them as an “empty box”. People do not expect to receive any interaction from this group and as a result can act in a very “flat” manner around them. This project had increased the interaction the group were providing and consequently “no longer were its members viewed as empty boxes but as human beings.”

Lisbeth and Graham concluded their session by discussing the fact that Lisbeth wants more people to consider providing powered mobility to those people who would normally be deemed “unsuitable” due to reduced cognitive ability. She is keen for as many of these “unsuitable” people as possible to have access to powered mobility as, she reflects, so many more could be suitable candidates if they only had the opportunity to practice.

This session, as you might imagine, caused some discussion and debate within the conference. It also gave me plenty to reflect upon. Currently, my role is as the only occupational therapist providing services on the Falkland Islands, and so there would perhaps be a very limited demand for a specialist training tool. However, I do have access to some older powered wheelchairs, which with some ingenuity and adaptation could perhaps be used to allow us to explore the option of providing powered mobility to those previously deemed unsuitable.

More importantly for my practice this session really made me think about how we as professionals interact with those with dementia. Can we, as professionals, say that we consistently interact with those with dementia in an engaging way at every single contact? I suspect the answer is not as unconsciously we “mirror” the behaviours of others (Chartrand, T.L. and Bargh J.A. 1999). Consequently, going forward I will endeavour to do so – thus reducing the risk of a person being considered an “empty box”.

Thank you to Dr Lisbeth Nillson and Graham Race for a thoughtful and informative session, which really allowed for the reflection of the speakers in addition to the audience. Going forward, I will endeavour to ensure that those people who would normally be considered “unsuitable” for powered mobility as a result of their cognitive ability are afforded the opportunity to practice before a decision is made.

REFERENCES

Chartrand, T.L and Bargh, J.A. (1999). The Chameleon Effect: The Perception-Behavior Link. Journal of Personality and Social Psychology. 76 (6), p893-910.

Nilsson, E. (2007). Driving to Learn. Available: http://www.lisbethnilsson.se/en/driving-to-learn/. Last accessed 24/08/2018.