

B. ÖSTLUND, O. DIEGEL, S. FRENNERT. 3D-Memories promoting inhibited potential in design. Gerontechnology 2016;15(suppl):156s; doi:10.4017/gt.2016.15.s.586.00

Background A norm-critical approach can bring new perspectives and increase the opportunities for innovation and identify barriers to innovation¹. Due to more efficient diagnosis and medication, it will become much more common for people with dementia to live in the community, and staying in their own home environment during the initial steps of the disease. The ability to innovate is often hampered by traditional prejudices, such as age². This project challenges the boundaries of what people with memory difficulties can accomplish if they get the opportunity to physically portray memories with 3D printing technologies, and the extent to which they can act as innovators in the product development process

Purpose The aim is to report on the development of a process-innovation to meet the needs for support for adults with a dementia diagnosis. The goal is to further develop the reminiscence method, combined with the production of artefacts with 3D printing technology.

Method The process innovation is developed in eight steps including a market analysis, testing the idea in reminiscence practise using participative design methods, exploring technological alternatives and prototyping with need owners.

Results & Discussion The result (*Table 1*) proves that it is possible to include adults with dementia diagnosis in the design process and that the elaboration with 3D printing to produce artefacts from memories is possible. The outcomes are a test model developed through exploring necessary 3D printing resources; the experience of using reminiscence methods; and available participative methods suitable for this purpose.

References

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Table 1. Three levels of combining reminiscence methods with 3D technology and participative methods

State of memory difficulties	Participation is possible in:	Appropriate 3D technology	User constellation
Present but not diagnosed	-Designing from memories -Using on-line service with pictures -Scanning	-CAD -Scanning -Printing	Group
Early dementia diagnosis	-Designing from memories -Using on-line service with pictures -Scanning	-CAD -Scanning	Individual or group
Severe dementia	-Using on-line service with pictures -Using already made artefacts	-On-line pictures	Individual with carer involved