

A.J. ASTELL, S. POTTER, E. PRESTON-JONES, B. BLACK, S. SIMONITE, S.K. SMITH. *CIRCA group programme for dementia: technology delivering cognitive stimulation. Gerontechnology 2018;17(Suppl):125s; <https://doi.org/10.4017/gt.2018.17.s.121.00>*

Purpose CIRCA (Computer Interactive Reminiscence and Conversation Aid¹) (Figure 1) is an interactive, multimedia system that supports one-to-one conversation between people living with dementia and caregivers². CIRCA contains photographs, music and videos, is easy to use and requires no preparation. The potential of CIRCA to deliver cognitively stimulating group-based activities in day and residential care settings has not previously been explored. **Method** One hundred and sixty people living with dementia have been recruited from 11 sites across Sheffield, UK. Groups of four to six participants are completing an 8-session intervention over four weeks: half are using the original standalone CIRCA device and half are using a new web-based version (CIRCA-WB). Pre-, post- and three-month assessment with Addenbrookes Cognitive Examination-III (ACE-III³; /100) as the primary outcome measure, and QOL-AD⁴ (scored between 13-52) and EQ-5D⁵ (/100) as secondary measures. All group sessions are video-recorded. **Results & Discussion** The 160 participants (28 male) are aged between 59-104 years (mean age 84.14) with the majority (131) living in residential care. ACE-III scores at baseline range between 4-91 (mean 45.51/100), QOL-AD scores between 19-146 (mean 31.05/52) and EQ-5D between 0-100 (mean 62.06/100). Preliminary analysis of the first 58 participants reveals a significant improvement in cognitive function over the three time points ($p=.01$), with significant increases from baseline to post-intervention ($p<.05$) which was maintained at 3-month follow up ($p<.005$) with 69% of participants showing an improvement in cognitive scores. There was also a significant increase in quality of life scores over the three time points ($p<.01$), with significant increases from baseline to post-intervention ($p<.05$) which was maintained at 3-month follow up ($p<.005$). In conclusion, the data support the utility of CIRCA as a tool for facilitating a group intervention for people living with dementia, including those with significant cognitive impairment (lower ACE-III scores). Participation in the group sessions leads to improved cognitive scores which are maintained at three months follow up, along with improved quality of life.

References

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Keywords: Dementia, interactive technology, groups

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Figure 1. CIRCA group