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A usability study for an innovative dementia aid: using co-creation to engage participants in the design process

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Previous studies have indicated that people with dementia can benefit from assistive devices which orient them to time of day and time-specific tasks (Topo et al., 2007). A usability study was carried out by HDTI at Coventry University to determine user needs for an innovative dementia product, a modified digital frame using video reminders (ReminderBot).

11 carers of people with dementia participated in a focus group with a prototype of the ReminderBot. The group were positive about the concept of the product and the co-creation tasks generated a number of suggestions as to how the product might best be developed, such as orienting sounds when an alert was about to play, an integrated camera, and the addition of time and date information. A number of methods were used to capture the data including flipcharts and worksheets. For one activity participants were given a blank frame to customise in a way which would fit their needs, which generated a good degree of consensus and a mix of qualitative and quantitative data by allowing tallies of suggested improvements to determine popularity, as well as the opportunity for less vocal participants to make notes or drawings during the task.

These techniques allowed a vast amount of data to be collected relative to a traditional focus group. The session was energetic and participant engagement was consistently high considering the emotional nature of the subject. In more traditional focus groups we have found that attention will drift over the course of the session, however this was not the case when using co-creation tools. The project provides strong evidence that co-creation techniques can be used effectively in usability studies in a way which is inclusive for a wider range of

participants than a traditional focus group, and to capture more data in the same time period.

References

Topo, P, Saarikkalle, K, Begley, E, Cahill, S, Holthe, T 2007, "I don't know about the past of the future, but today it's Friday" – Evaluation of a time aid for people with dementia, *Technology and Disability*, 19, pp. 121-131.