

Multimedia Biographies for Individuals with Alzheimer's Disease and their Families

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Background: This work stems from the increasing recognition of the beneficial effects of reminiscence for senior citizens [3, 5], and seeks to enhance the ability of individuals with Alzheimer's disease (AD) and their families to reminisce.

Objective: The aim of the project [1-2] is to develop methods for constructing life history multimedia of persons with AD, and to evaluate Alzheimer's patients' responses to observing their life stories, as well as the impacts that creating such biographies has on family members. Our work differs from Project CIRCA [4] in that we explicitly focus on personal information, whereas CIRCA developed multimedia that are generic to a specific locale.

Methods: Two daughters of a 91-year-old woman receiving institutional care agreed to participate with informed, signed consent. The daughters provided information about their mother's life through stories, still pictures, and home videos. Using video editing software a preliminary 7-minute video history was constructed. The video was shown to the daughters and based on their feedback a 40-minute nonlinear video was completed and published on a DVD. The DVD was shown to Jenny on three separate occasions and her verbal and non-verbal responses were filmed for subsequent analyses. The daughters were given a copy of the Jenny's video history and were instructed to show the video to Jenny as often as possible and record their observations of her responses. Six month and one year follow-up interviews with the daughters and videos of Jennie's responses were recorded and analyzed.

Results: Content analysis of transcribed interviews with Jenny's daughters and analyses of Jenny's video responses showed that Jenny's overall response to viewing the video history was positive as indicated in both her verbal and non-verbal reactions. Jenny views the DVD often and it continues to give her delight, apparently enhancing her sense of identity and improving the mood with which she interacts with family members. The biography has also had a significant impact on the daughters' relationship their mother. They report positive reflections on past family experiences, re-evaluation and reconnection to their mother, and a greater acceptance of their mother's disease.

Conclusions: Since then, with the help of support from the U.S. Alzheimer's Association, we have begun production of an additional six biographies, all of which should be completed by the time of the conference. Our presentation will include results from all seven cases.

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References:

1. Cohene, T., Baecker, R.M., and Marziali, E. (2005). Designing Interactive Life Story Multimedia for a Family Affected by Alzheimer's Disease: A Case Study, *Proceedings of ACM CHI 2005*, Portland, OR., April 2-7, 2005.
2. Cohene, T., Baecker, R.M., Marziali, E., and Mindy, S., Memories of a Life: A Design Case Study for Alzheimer's Disease. In Lazar, J. (Ed.), *Universal Usability*, John Wiley & Sons, 2006, in press.
3. Coleman, P. G. (1986). *Aging and reminiscence processes: Social and clinical implications*. Wiley.

4. Gowans, G., Alm, N., Astell, A., Campbell, J., Dye, R., Ellis, M. (2002). CIRCA (Computer Interactive Reminiscence and Conversation Aid). *Proceedings of 18th International Conference of Alzheimer's Disease International*, Barcelona, Spain, October 23-26, 2002
5. Wong, P. T. P., & Watt, L. M. (1991). What types of reminiscence are associated with successful aging? *Psychology and Aging* 6(2), 272-279.