

ORAL PAPER PRESENTATION 4: INFORMATION AND COMMUNICATION

Printed digital storytelling for older audiences

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Purpose Digital storytelling is a method of short personal film making that originated as a form of community empowerment (Lambert 2013). It has many applications ranging from international development, education, social media and health. At present, stories of this kind are video files hosted on a website and consumed passively. This makes them difficult to find and browse, especially for non-technical users. Imagine instead if they could be printed like patient information leaflets, with associated audio or video that plays on a nearby smartphone. Then they could be distributed physically and consumed interactively through a smartphone app that is triggered by the paper itself. This possibility is supported by the *Next Generation Paper* platform developed at the University of Surrey (Frohlich et al 2019). Here we report a design exploration showing the feasibility and feel of this idea for a corpus of digital stories from a previous study of dementia care. Research insights are generated through design practice itself, ahead of user feedback, although we realise this is unconventional in gerontechnology (Zimmerman et al 2007).

Method We took a corpus of 15 digital stories recorded in a previous study of digital storytelling in a Brazilian care home (Abrahão et al 2018). Participants in that study included a 60 year old lady with dementia and her formal and informal carers, all of whom used our Android digital storytelling app called *Com-Phone Story Maker* to create digital stories about the current life of the lady in the home. All of these had either Brazilian Portuguese voiceover or music clips associated with them (rather than video). So we created a conventional photo album and set of loose printed photos with an audio layer and its textual translation into English. We now reflect on aspects of the media and interaction design which differentiate this medium from traditional story videos. This is a technical analysis not yet informed by user feedback. **Results & Discussion** Video demonstrations of the augmented album and prints are shown here:

Digital story corpus as a photo album: <https://vimeo.com/showcase/5956567/video/392030063>

Digital story corpus as talking prints: <https://vimeo.com/showcase/5956567/video/392031208>

We found the augmented album to have different properties to the loose prints. The album lent itself to structured presentation of composite photos in a digital story in a fixed order, and to giving to others as a gift. In contrast, the loose prints allowed for more flexible and interactive presentation, and also to displaying on a wall with occasional access to the links. The 'talking photo' voice associations provided a natural interpretation of the images in local language, and the English text translations were useful for English-speaking audiences. In general, the printing of personal multimedia stories provided an accessible physical reminder and interface to story content, and could be copied and distributed widely if required. The implications for gerontechnology are that they could be valuable for older people who still enjoy paper, but are willing to bridge to screen information on their mobile phones or televisions. Future work should test these assertions for a range of printed digital stories with older audiences. The approach might also be tried 'paper-first' to augment actual patient information leaflets with video illustrations and voiceover. An example of this can be seen here: <https://vimeo.com/showcase/5956567/video/391984137>

References

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Figure 1. Digital story content printed as a photo album or loose prints. Links play on a smartphone.