Augmented health education for older adults

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Purpose The global number of people aged 65 and over is expected to more than double in the next three decades, and the World Health Organization has declared that "ageing well must be a global priority." (United Nations, 2020) In this context, health education can be a powerful tool to help people age well as it informs them of health risks and promotes healthy lifestyles. Access to and the understanding of health information can lead to better health and social care outcomes. Digital channels have increased the volume of health information available but can also alarm, confuse or overwhelm people. This study was conducted to examine how paper and screen-based media are used in current forms of health promotion, and to collect feedback on the usability and value of a new technology for combining paper and screen reading through augmented print. This involved the use of a new platform for ' Next Generation Paper' (NGP) developed at the University of Surrey for linking digital content on a smartphone with printed hotlinks on a document (Frohlich et al 2019). This kind of Augmented Reality paper was demonstrated through an NGP '*a-book Player'* app and an augmented booklet on healthy ageing containing hotlinks to video clips, animations, voiceovers and web links (*Figure 1*). A video demo of this booklet can be found here: https://vimeo.com/926936499?share=copy. **Methods** We conducted two focus groups with older adults 60 years or older that had a smartphone or tablet, consecutively with 4 and 5 participants (n=9). The first hour of the group discussion was used to explore their experience receiving and seeking health information. The second hour of the session involved demonstrating a health education a-book prototype and collecting their feedback. The sessions were recorded and all the discussion is being transcribed and analysed according to a thematic. **Results and Discussion** Our early findings revealed that the participants do not tend to seek health information when they are healthy, and all of them used online search engines to find health information when they are sick. Most of their current health information comes through digital media, and just a few of them received some kind of health education through paper delivered by health professionals or the UK National Health Service (NHS). The use of paper was mentioned as a way of 'printing to remember', when they wanted to save very relevant information that they found online. Participants also liked the idea that all public health leaflets could have links to additional explanatory information available on their phones. For example, printed diagrams for physiotherapy exercises could have video demonstrations with them, or printed breathing exercises with guiding videos. There was also a discussion about what they would change in the app to improve the user experience of the a-book on their devices. For example, more intuitive layout and different sizes of buttons and images. Also, insights as 'printed bookmarks of health discoveries' are being explored for the development of a new prototype using augmented paper. In general, the study confirms a migration from paper to screen media in the reading of health information (Ferraz, et. al, 2024), but a residual role for paper as a tangible reminder and bridge to screen media. This shows an opportunity to improve the link between paper and screen media in the use of health education for older adults.

References

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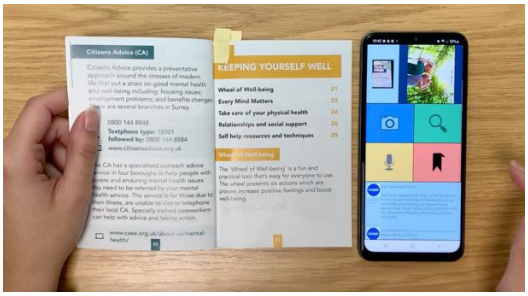

Figure 1. An augmented health information booklet on healthy ageing