Exploring technologies to foster wellbeing and vitality among older people

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Introduction

The interest in older people as technology users is increasing. A growing body of literature is concerned with the design of digital solutions for the ageing population, many aiming at facilitating active ageing. Maintaining social, physical and mental wellbeing may prevent functional decline and hence postpone the individual's needs for extensive, costly health care services.
Healthy eating and social participation are two core challenges among older people. Subtle small changes in nutrition and social contact can accumulate over time, often leading to vicious circles of lost vitality, which in turn may result in increased demand for extensive health care. A growing ageing population combined with a limited number of qualified health care personnel challenges the health care services.
Although older people use a mobile phone or have a PC, large cohorts are still laggards to adopt new technologies like smart phones or tablets. For this presentation we will report on experiences from exploring this technology's potential to foster participation and stimulate wellbeing seen as social engagement and healthy eating.

Materials and Methods

We collected data in from November 2012 to May 2013, first, as a focus group interview and secondly as three iterative technology workshops with six home dwelling care recipients. Three men and three women aged 76-95 (mean 88,5) participated. The focus group interview was undertaken to identify their challenges with regard to diet and healthy eating and social contact and participation in addition to their attitudes towards and experiences with technology. During the technology workshops the participants tried out tablets (iPad) and applications (apps) for social contact, such as video communication; and for facilitating healthy eating, for example acquisition of food, meal tips and recipes. The conversation evolved around their interest in using such applications in everyday life and the applications' perceived usefulness for them. Experiences from the first workshop informed the second and third workshop. The empirical data: field notes and transcripts from the focus group and workshops was subject to inductive qualitative content analysis with coding within and across the data sets. The codes formed three categories of technology experiences.

Results

The participants reported challenges to healthy eating due to health issues, functional decline or living alone. Their social network was reduced and some of the participants depended on help from their family. Attitudes towards technology varied from being generally sceptical to being enthusiastic.
Their experiences with technology varied from a feeling of exclusion to claiming increased life satisfaction. The hands-on try-outs of tablets showed that an iPad was relatively easy to use. However, significantly impaired vision created difficulties. Applications for social contact, such as video communication appealed to some participants. They showed less interest in applications facilitating acquisition and preparation of food.
Preliminary analysis of data from the focus group and the technology workshops points to three categories of technology experiences, influencing wellbeing and felt vitality; *the excluded*, *the entertained*, and *the networker*. The *excluded* was sceptical to the on-going digitalization, expressed mistrust towards the technology and feared necessary bank and health care services would be solely replaced by technology. The *entertained* used the tablet to find information on Internet, read digital newspapers, catch up on favourite TV-shows or music, or just reminisced by looking at pictures of family, from travels or past activities. The *networker* used the tablet to communicate with friends and family, some far away and others living nearby. For the latter two categories of experiences, enthusiasm, curiosity and willingness to embrace new technology were reported to positively affect their quality of life.

Discussion

The research reported here can help to understand the potential of an easy-to-use, available technology to facilitate active ageing. We will elaborate further on potential for using tablets in everyday activities to facilitate wellbeing by social contact and participation, and as encouragement for healthy eating. The older persons' varying experiences lead us to suggest individual considerations and tailoring before implementation if we are to fully exploit the potential in use of technology mindful of each user's choices, needs and interests. Our initial findings add to increasing insights into use of ambient assistive technology to compensate for functional declines that are part of the ageing process. We will share how common and easily available technology may support active and independent living, foster wellbeing and vitality, and postpone demands for extensive health care resources and costly services.

Acknowledgments

Work reported here was carried out as part of ACTIVE - "Active ageing enabled by services and communication technologies", which is funded by Regionale Forskningsfond, Hovedstadsfondet, Project no. 217679.

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