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Christopher Sze Chong Lim
University of Dundee

Sara Nevay
University of Dundee

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Crafted with Care: Reflections from co-designing wearable technologies with care home residents

Christopher Sze Chong Lim* and Sara Nevay

University of Dundee
* s.w.lim@dundee.ac.uk
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Abstract: With increasing longevity and changes in population demographics; designers, engineers and architects are faced with the challenge of providing older adults with enabling technologies and home environments that facilitate physical activity and wellbeing. To promote acceptance and adoption, making these technologies more desirable and less stigmatizing is crucial. In this paper, we outline a craft-based co-design methodology that we developed working with groups of care home residents designing wearables for research. The research asks care home residents to wear activity-monitoring devices to provide insight into the ways they currently utilise their spaces and where improvements could be made. We propose that a craft-based approach allows designers to understand and uncover people's capabilities and needs in a non-intrusive and empathic way. Our findings show that using this approach enabled creativity, confidence and connectedness amongst participants. We discuss our reflections and insights that have implications on the approach and future work.

Keywords: Wearables; Ageing; Craft; Co-design

1. Introduction

The 'oldest old' are the fastest growing demographic in UK society. With increasing longevity, changes in our capabilities due to age or disease could cause us to lead less physically active lives. Research has shown that regular physical activity is an important measure of health and function in later life (Talbot et al., 2002). Unfortunately inactivity is particularly common amongst older people. Accelerometry data collected in England showed that only 6% of men and 4% of women over the age of 75 years reach current physical activity recommendations (NHS Information Centre for Health and Social Care, 2008). Furthermore, in care homes around Britain, 78% of men and 86% of women were classified as inactive. This is twice the number of people living in private homes according to

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About the Authors:

Dr Chris Lim. A researcher, designer and teacher, he is interested in the design and discourse of technological products that support wellbeing and quality of life. His research interests are in the area of designing for an ageing population, co-design practice and 3D printing as a tool for personalisation.

Sara Nevay. A current PG researcher her research explores and mediates communication through co-designing textile and sensor based artefacts or activities with older adults. Her PhD project considers loneliness and strategies for social connectedness through making and e-textiles.