

Supporting Mental Wellbeing through Digital Design

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What is the PhD about?

Explores the role of interaction design in supporting mental wellbeing

Involves a number of projects with mental health clients

- ❖ Individuals with dementia in hospital environments
- ❖ Individuals with clinical depression who have or will complete programmes of Cognitive Behavioural Therapy (CBT)
- ❖ Individuals with personality disorder in forensic mental hospitals who receive Dialectical Behavioural Therapy (DBT)

Aims to...

- ❖ develop technology to complement existing health care practices
- ❖ enable functionality that supports individuals' coping with emotional distress, helps them form and maintain positive interpersonal relationships, strengthens their sense of self and motivates engagement in activities that make life more meaningful

Prototype: Mindfulness Spheres

Upon touching, the *Heartbeat Sphere* assesses and reflects a person's heart rate through soft pulsating vibrations and colourful lights, providing a new, experiential way of bringing awareness to one's body. As biofeedback it further enables the self-monitoring and regulation of arousal.

The *Calming Sphere* is a non-digital bead bracelet that the women can hold on to at times of personal distress. A repetitive rolling of the beads between one's fingers can help release inner tensions, facilitating mindfulness and peacefulness with one's self.



Current Project: Spheres of Wellbeing

Follows a person-centred, collaborative approach in the development of a set of innovative, interactive objects: the Spheres of Wellbeing.

Specifically designed for women with a dual diagnosis of learning disability and personality disorder living in a medium secure unit.



Motivation

The women present a very vulnerable and difficult to treat client group due to their extremely challenging behaviours, complex needs and persistent lack of motivation to engage in therapy. Simultaneously, they have the most need for attention, care and positively experienced interactions.

Aims

Interaction with the Spheres is sought to encourage practices of mindfulness and to strengthen the sense of self of the women, both vital components of DBT – which is a specialist psychosocial treatment for their condition.

Prototype: Identity Sphere

The *Identity Sphere* gently invites the women to engage with their personal space and body through visual tags (body transfers and wall stickers), which will be recognised by a device that responds to them by displaying short personalised videos envisioned to strengthen their sense of self.



Next Steps

Continuation of the development of the Spheres and submission of the research to NHS R&D and REC for ethical approval. The collaborative work with the women is planned to start in October 2012, including a rich exploratory evaluation of the Spheres.