Design for connectedness

Designing a playful product for people living with moderate to severe dementia to support emotional well-being

Context

This project focuses on contributing to a feeling of connectedness for **people in the mid to late stages of dementia** living in a nursing home. Feeling connected is still important for these people. They may suffer from disabilities caused by their disease, losing their memory and ability to make decisions, but there are also things that are not likely to be affected by dementia. **A person with dementia stays capable of feeling negative emotions**, like fear and pain, **and positive emotions**, like interest and happiness (Perrin et al., 2008; Plaats & Kits, 2016). Therefore, it is important to contribute to feelings of connectedness, to support emotional well-being.

What is connectedness?

I created a framework which identifies that connectedness can be divided into three types:

Social connectedness is about our interpersonal contacts and relationships, through which we feel connected to others. It relates to our needs for love and belonging, feeling related to, getting esteem from and being acknowledged by others.

Personal connectedness is about feeling connected to your psychologicalself. It is about who you are as a person, about your beliefs and background. It is based on our basic needs for self-esteem, self-actualization, cognition, aesthetics, transcendence, purpose, competence, impact, morality, autonomy and ease.

Physical connectedness is about feeling alive in the present moment. The human needs related to this type are all focused on bodily experiences: physiological safety and survival, health, fitness, order and sensory stimulation. Therefore, physical connectedness focusses on what we experience through our senses and feel happening in our body that makes us feel alive.

Disconnectedness in dementia

People living with moderate to severe dementia spend time in **static environments** every day. This means that they are surrounded by static objects and non-responsive, apathetic fellow residents. These static environments cause people to become **apathetic** or **restless**, which negatively impacts all three types of connectedness and hereby **decreases emotional well-being** (Alzheimer's Society, n.d.; Anderiesen Le Riche, 2017; Ettema et al., 2005; Perrin et al., 2008).

Apathy: withdrawn from the world in a state of no emotion

Restlessness: in search for connection paired with negative emotions

> "Designing a playful object that enables moments of physical and personal connectedness for people in the mid to late stages of dementia, to support emotional well-being in static nursing home environments."

Interaction vision

The interaction between user and product should feel like playing with a ladybug:

- proactive
- lively
- explorative
- enchanting
- subtle
- open-ended

The final concept: Twinkle

Twinkle consists of a sphere, with an **interactive dynamic light** inside of it. This light can move across the surface of the sphere to proactively try to attract the attention of residents and **trigger the curiosity** in them **to initiate interaction**. When an interaction is started, the behavior of the light will change depending on the actions of the user. This way, it allows the user to **explore the possibilities** of the object. This way, Twinkle provides both **cognitive and sensory stimulation** to enhance personal and physical connectedness and thereby support emotional well-being for people living with moderate to severe dementia to **bring back the twinkle in their eyes**.

Alzheimer's Association. (n.d.). Late-Stage Caregiving. Retrieved February 13, 2019, from https://www.alz.org/help-support/caregiving/stages-behaviors/late-stage / Anderiesen, H. (2017). Playful Design or Activation. / Ettema, T., de Lange, J., Dröes, R.-M., Mellenbergh, D., & Ribbe, M. (2005). HANDLEIDING QUALIDEM, versie 1. 34. / Perrin, T., May, H., & Anderson, E. (2008). Wellbeing in Dementia. / Plaats, A. van der, & Kits, D. (2016). De dag door met dementie. Kroese Kits Uitgeverij.

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08-04-2019
MSc Design for Interaction

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