

# PhD

## THESIS SERIES

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**Design for Long-Term Behaviour Change:  
An Exploratory Study in Persuasive Interactive Systems for  
People with Diabetes in Self-Management**

2016

# PhD

1999 – 2020 THESIS SHOWCASE

Persuasive design is one of the concepts of design for behaviour change using design and technology to influence attitudes or behaviour in specific ways. However, the persuasive and long-term effects of different persuasive strategies, including narrative and statistical forms of persuasive systems are mixed and not well understood. Regarding the fact that people with chronic diseases require lifestyle changes and adherence to long-term medication, this research investigates how persuasive interactive systems could help motivate and persuade people with diabetes to engage in self-management and healthier behaviour over time. The study takes a multi-disciplinary approach that involves knowledge and discussions in regard to health psychology, communication theories, and human-computer-interaction. Mixed research methods have been adopted including interviews, system evaluations and a design prototype. The findings illustrate the challenges in relation to diabetes management, diet control and physical exercise, which are influenced by patients' internal and external resources. This study suggests several models and frameworks of design for maintaining behaviour change to enrich the knowledge of the design concepts, and provides insights for future development of persuasive design and other design interventions for sustainable behaviour change.

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