

habit theory to BCITs by exploring the direct targeting of the nonconscious in mobile-based BCITs.

I have further refined my goal to: explore the use of Cognitive Bias Modification (CBM) [7], nonconscious goal priming (NGP) [1] and implementation intention formation (IIF) [4] techniques on mobile devices to achieve habitual behaviour change.

Research questions

My primary research question is: What is the most effective way to deliver nonconscious interventions on mobile devices to achieve habitual behaviour change? This requires consideration of the extent that nonconscious interventions need to be supported by congruent conscious interventions, potentially of the “restricting unwanted behaviour” type we explored in a project to encourage eco-friendly kettle usage [2].

Research approach

For each theory-based approach (CBM, NGP, IIF), I have planned a short-term lab and longer-term in the wild evaluation. The lab studies test the efficacy of interventions on cognitive variables that indicate the availability of habit-related constructs (see [7] for a review of measures) and the in-the-wild studies test whether such interventions impact on actual behaviour.

Remaining research efforts

I am currently refining the lab experiments to test the impact of NGP on smartphones. I am awaiting ethical clearance for a lab & in-the-wild project on the use of CBM techniques on people with hoarding issues, delivered via tablets. I need to finalise my experiment design to explore the use of smartphones in creating effective IIF.

Expected results

For each of CBM, NGP and IIF techniques on mobile devices, I will explore user reactions, determine whether each technique can alter cognitive variables, and demonstrate the extent to which this has an impact on habitual behaviour.

References

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