A Mobile App Adopting an Identity Focus to Promote Physical Activity (MoveDaily)

Iterative Design Study

Floris Hooglugt, MSc; Geke D S Ludden, MSc, PhD

Introduction

Web-based and mobile interventions to influence physical activity behavior have had limited effects on sustained behavior change [1,2]. One reason may be that the interventions aim to change largely habitual behavior [3]. Following an identity-oriented approach could be a successful strategy to behavior change because people are committed to behave in line with their self-perception of identity [4].

This paper [5] describes a Research through Design (RtD) process in which design activities are carried out as part of the knowledge-generating process [6-8].

Habit and identity loop

By experiencing positive feedback on daily habits, new beliefs about one's identity can be formed. We visualized the relationship between habit forming and identity as two overlapping loops: the habit loop and the identity loop. The habit loop is part of the identity loop, showing how behavior that is performed consistently forms the starting point of changing one's beliefs. Concurrently, the identity loop visualizes how beliefs can, in turn, influence behavior [4].

Discussion

Through the presented approach, which combines the habit loop with the identity loop, we presented initial promising results toward understanding how sustainable behavior change can be achieved. Habits serve as an important base for behavior change by having someone identify with the personal importance of a behavior repetitively. Furthermore, we demonstrated how such a theoretical idea can be explored in a three-step iterative RtD approach.

References

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Habit loop Design Phase 1 In the first RtD phase, we found that interacting daily ∐≡ with diary cards and reflecting on physical activity patterns is a Diary cards promising strategy but prototypes works better through a digital medium. 8 participants Reflection Design Evaluation Phase 2 In the second RtD phase, self-report habit index (SRHI) ratings from all Web-based participants generally prototype increased each week. 26 participants Design Evaluation In the conceptual design Phase 3 phase, we found that the concept of the mobile app was positively evaluated by participants. However, participants mentioned that Conceptual terms such as "identity" do design not resonate with them and that scenarios could be 4 participants simpler.

Identity loop