

Designing Ambient Narrative-Based Interfaces to Reflect and Motivate Physical Activity

Summary:

This research introduced a narrative-based interface to show physical activity data in a friendly way and promote users' physical activity.

Showing exercise data to users directly would harm users' motivation, by using a narrative-based interface to reflect user's physical activity in a non-confrontational way can avoid that effect. The narrative story could also keep users continue their project by invoking their empathy and curiosity.

By interviewing with several participants and take their response about the story, and making prototypes to refine the layout and story, the research team found users need the story needs to be connected by basic logic and continuous between chapters.

The research group has divided participants into single-chapter and multi-chapter group and take their response and record their physical activity data. Response data found participants in multi-chapter group show higher empathy.

Multi-chapter group participants check their phone screen more frequently than single-chapter group participants.

Participants could automatically or manually record their physical activity through the application. 81.6% of physical activities been logged automatically by the application.

Participants in Multi-chapter group have recorded more physical activity over three weeks of the test.

After the test finished, half of participants' interest in physical activity has increased. Some participants have transferred from narrative-driven user(focus on the story) to data-driven user(focus on their physical activity data).

- This research found a novel approach to evoke user's willingness in physical activity in a budget way.
- By using the story-driven interface to reflect user's physical activity while prevent hurt user's self-integrity.
- Multi-chapter story can arouse user's curiosity continuously and have better result in attract users.

Questions:

There are games in the market which could reflect user's physical activity, is this research repeat that approach?

What would happen after the story finished?

What if the story doesn't attract user?