Balancing Exertion Experiences

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Jogging

- People sometimes like to jog with other people
- This can get difficult when the other person is really far away
- How do we solve this problem?
Jogging over a Distance

- Focuses on the social aspect of exercising
- Uses heart rate information
- Shared information through audio
  - Spatial representation of heart rate
User Study

- Collected data from interviews, heart rate data, and recorded interactions
- Asked people to talk about the experience
Creating Balanced Exertion Experiences

- Measurement
- Presentation
- Adjustment
- Control
Tactics

- Facilitate Empathy
- Low Resolution Exertion
- Support Varying Levels of Exertion
- Exploit a Shared Space
- Negotiate Duration
- Physical Risk
Conclusions

- Recognize physical differences and design technology that supports it.

- The jogging system works because of the interactions it supports and what the experience fosters. As interaction designers it is important to understand the impact of user experience on any application. Simply giving people headphones and a heart rate monitor would not achieve the same results as Jogging over a Distance.
Related Work
RunWithUs: Social Sports Application in the Ubiquitous Oulu Environment

**MUM '11**: Proceedings of the 10th International Conference on Mobile and Ubiquitous Multimedia
Introduction

- Regular, moderate physical activity has been recommended to prevent adverse health outcomes.

- Big News!! It can be difficult to motivate yourself or others to exercise.
Ubiquitous Oulu

- City in Finland attached to a WiFi network with embedded sensors
- Open Oulu Project
  - http://www.ubioulu.fi/en
Motivating Users to Exercise

- Give users proper credit for activities
- Provide personal awareness of activity levels
- Support Social influence
- Consider the Practical constraints of users’ lifestyle
Flow is Important

- It is important to give the user a feeling that they are immersed and involved in the activity.

- 10 factors listed by the paper about flow...
Social Activity

- Exercise and gaming are typically viewed as individual activities
- Competition, Companionship, and Cooperation can also be motivating
Technology to Motivate

- Sensing and Feedback technologies that promote activity awareness and motivate change
- Technology can facilitate social interaction through location
RunWithUs

- Designed to work with UBI Oulu to track and share activity with other users.
- Tracks Personal Workouts
- Social Network and Team Component
- Marketing tool to stimulate new activity
What the user does...

- Start the application and say how long you expect to jog
- Carry a personal wifi device
- Go run around the city
What the app does

- Communicates with the ubiquitous city to track location and ID information
- Suggest routes for you to take during your jog
- Other users can see where you are and find you
Reliability

- The app uses WiFi and a city wide connection.
- Without that connection this would not be as reliable, however it could be possible.
User Study

- The user study looks at the ability of the application to motivate activity and finding new exercise partners
- Unfortunately, it hasn’t been conducted yet...
- They did conduct a survey to gauge interest
Survey Results

- Keep Tracks and Statistics?
  - No
  - Yes

- Create a team and compete?
  - No
  - Yes

- Receive Recommendations?
  - No
  - Yes
Conclusions

- RunWithUs was a service provided through the ubiquitous city
- Most people wanted to use it to track their own activity
- The technology in this environment was almost invisible
Reflections

- RunWithUs is an application that was intended to be used to promote finding a running partner and motivating people to view exercise more socially.

- Running over a Distance was geared toward making running itself a more social experience.
Reflections

- Both of these papers hint at the same idea of using social interaction to motivate personal change
- Immersion in the social aspects of the exercise make the technical and individual aspects of the activities disappear