Health and Wellbeing Short Deck

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Why is health and wellbeing important?

- Design for detecting Frustration, Pain, Boredom and Delight!
  - I.E., how do people really react to our products?
- Make people more productive
- Provide a complement to relationship to therapists
- Teach positive coping skills
- Facilitate behavioral change for improved lives
- Alert medical/family caregivers in times of need....
- Etc.
What is this new field and why is it hard?

- **Affective computing** is the study and development of systems that can recognize, interpret, process, and simulate [or respond to] human affect
  - It is an interdisciplinary field spanning computer science, psychology, and cognitive science
- Hardest problems: (1) how to recognize emotions? (2) how to integrate emotional data? (3) how to act upon recognizing an emotion?
Who is doing it?

• Research is being carried out on:
  • Sentiment analysis in text
  • Video-based (facial) emotion detection
  • Posture
  • Speech analysis
  • Brain imaging
  • Eye tracking and pupil dilation
  • EEG
  • EKG
  • EDA
  • Psychology/psychiatry
Sensor Revolution: Health and Beyond
#1 Displaying Emotion to the User

Smart Environments

Smart Fabrics

Mobile UX

Ambient Devices

Wearables

Visualizations

Real-Time Emotional Feedback
#2 What do you do about it?
Mobile Intervention Apps

Laura Pina, Kael Rowan, Paul Johns, Asta Roseway, Ran Gilad-Bachrach, Pablo Paredes, Mary Czerwinski
#3 Exploring Interventions and Context

“Bubo” can assist you throughout the day.

“A wise heart can handle almost anything, here are some ways to get there.”

“Bodies need rest too, let’s give yours a break, shall we?”

“A skillful mind can lead to skillful behavior, let’s try.”

Wearables

Ambient Devices

Mobile

Real-Time Interventions

Real-Time Interventions
Positive Computing at MSR: All things emotional

Thank You for Your Attention!

Questions?

http://poscomp.net/