

Seize the Moment:

An Exploratory Study to Identify Opportune Moments in Everyday Life to Promote Healthy Eating



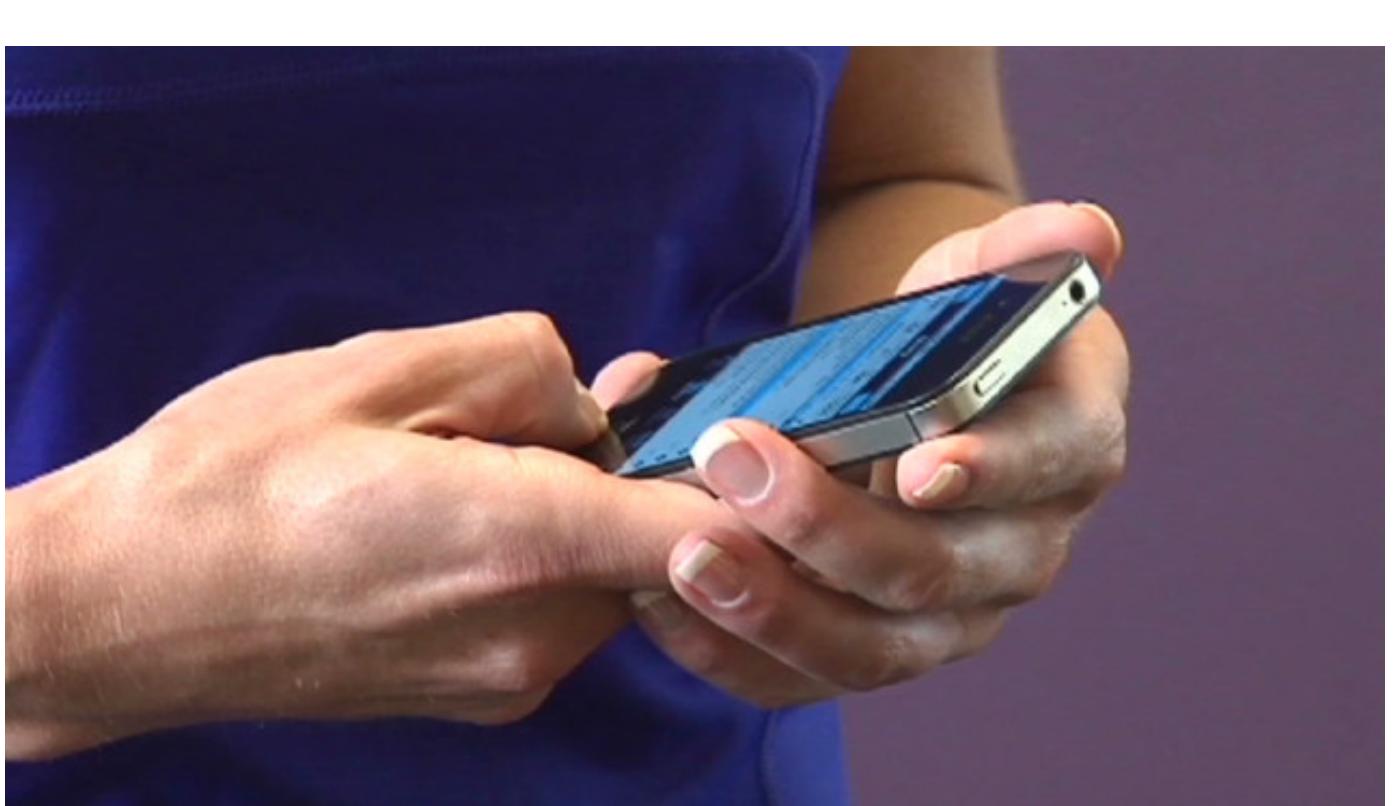
1 Motivation



Communicating suggestions at the opportune moment can have **greater persuasive power**



Certain moments in everyday life can be **more receptive** for health/food suggestions



Smartphone technologies can help to **personalize** and **contextualize** receptive moments to suit individual needs

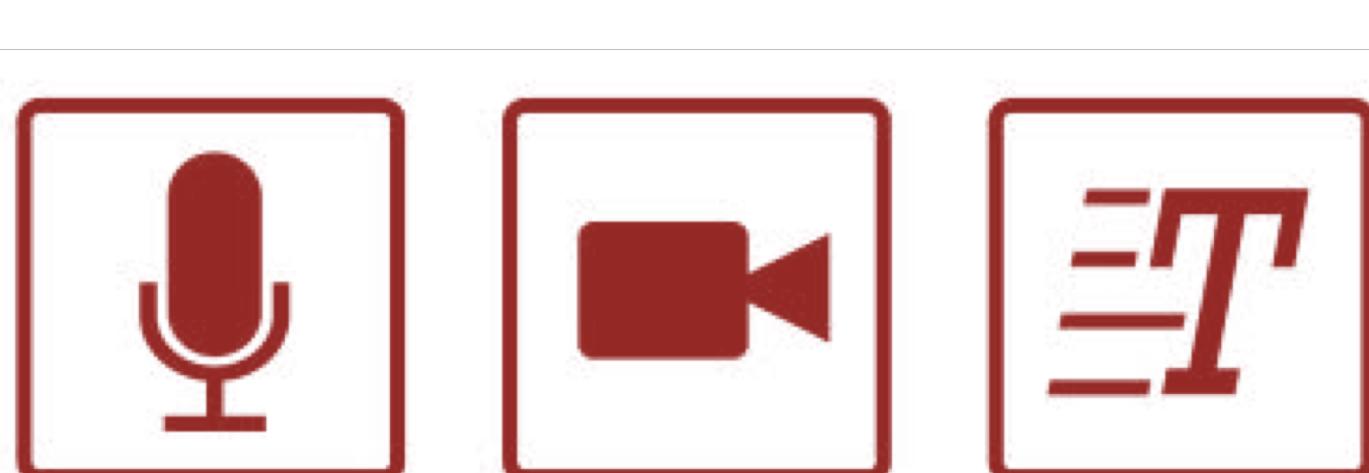
2 Goals



Find moments that are **teachable** or **actionable**

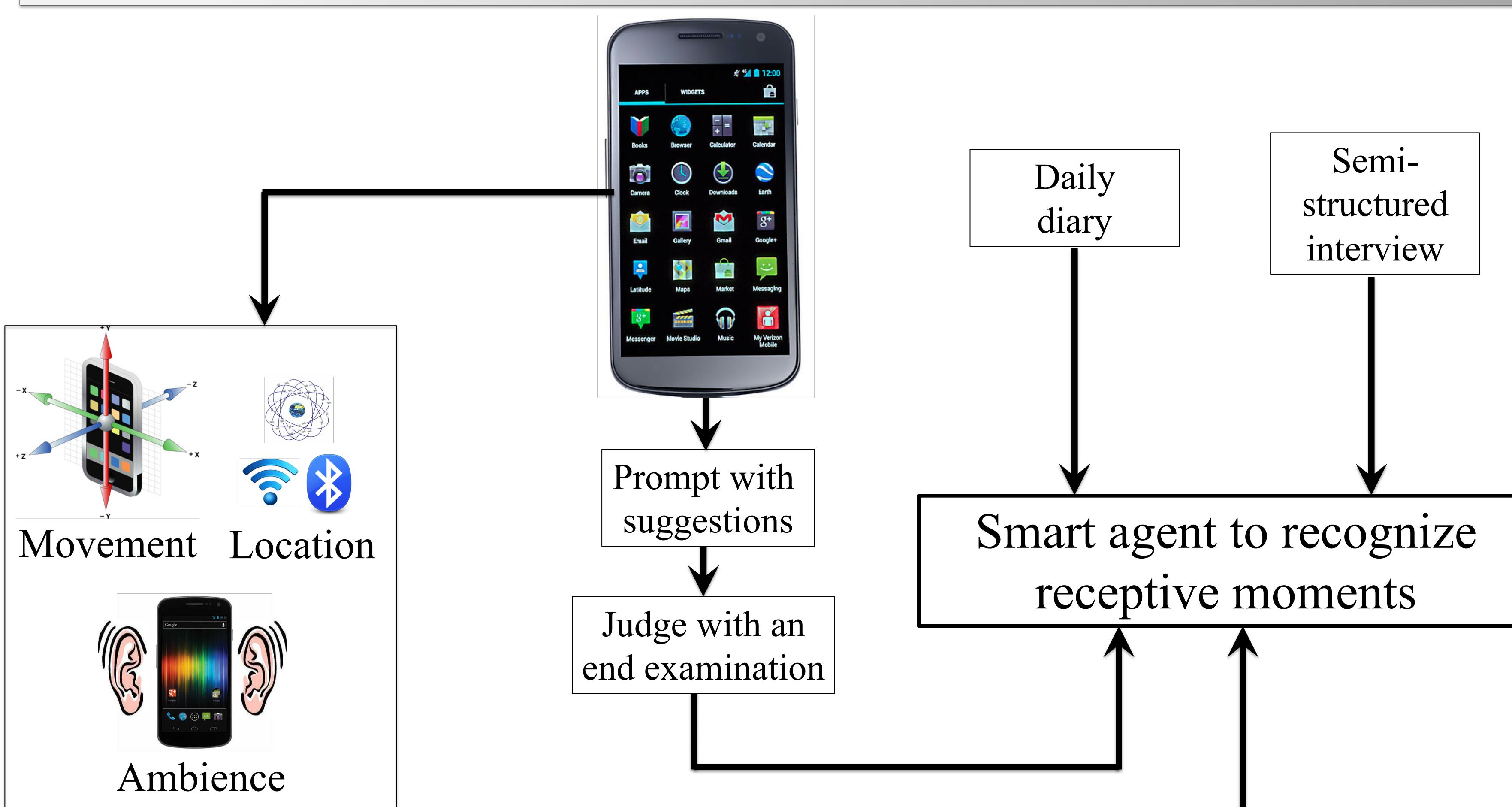


Classify **teachable** or **actionable** moments with **sensor enabled** mobile phones



Determine which **media** is appropriate for which moments

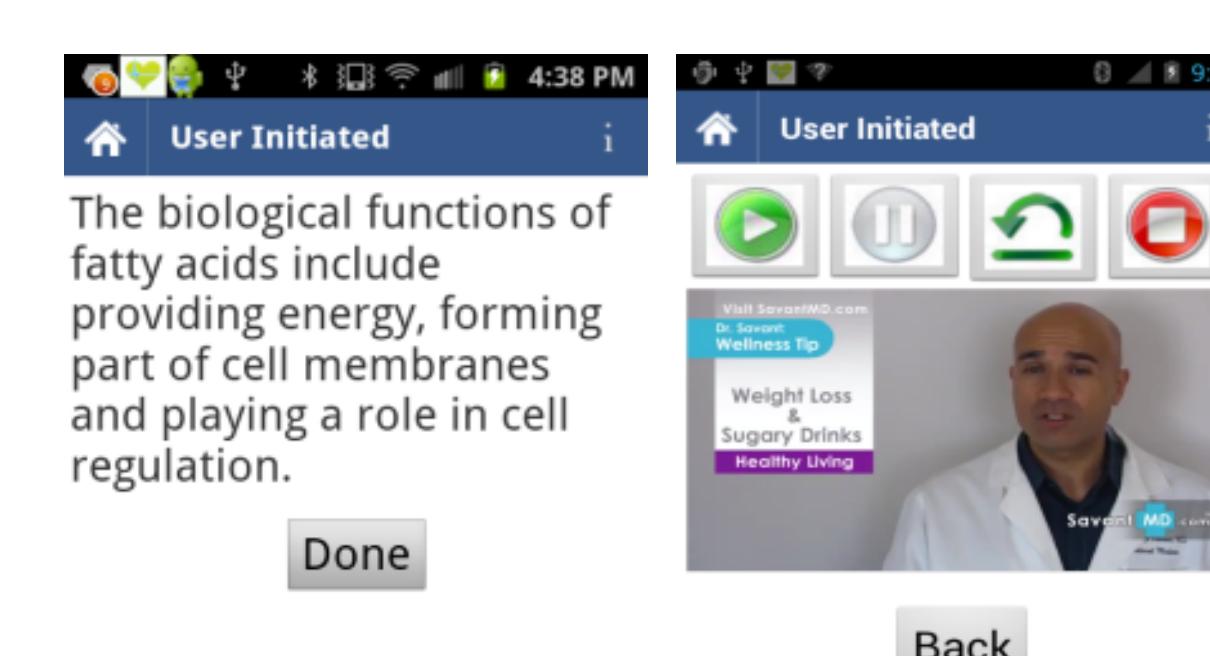
3 Study Methods



4 Prototype and Results

Prototype

- ✓ Custom software was developed for Android smartphones



- ✓ User could self-initiate messages or receive them after being prompted by phone vibration

Figure: Application screenshots for text (left) and video (right) messages

Pilot study

- ✓ 8 graduate students participated in the pilot
- ✓ Each participant carried the phone for 7 days
- ✓ Messages were randomly prompted multiple times per day (15-45 minute intervals)

Initial findings

Most suitable teachable moments

- ✓ Full chunks of time: mornings, meal times, some time before going to bed
- ✓ In-between times: commuting, between classes

Subtle reminders are better

- ✓ Reminders should be subtle in order not to interrupt concentration or cognitive effort

Context determines the optimal media

- ✓ Text with an illustrative image worked best in mobile situations or during small breaks
- ✓ Audio/video had more impact, but required more time and privacy

User-initiated vs. System-generated learning

- ✓ More time and attention was allocated on the messages when learning was user-initiated

5 Conclusions and Future work

Opportune moments can be identified based on mobile phone sensors

- ✓ Initial training period to collect information
- ✓ Messages could be tailored to fit mental, physical and social context, once patterns are identified

Impact of contextualized messages on behaviour?

- ✓ Longer studies with larger sample sizes needed to assess the impact on knowledge and behaviour



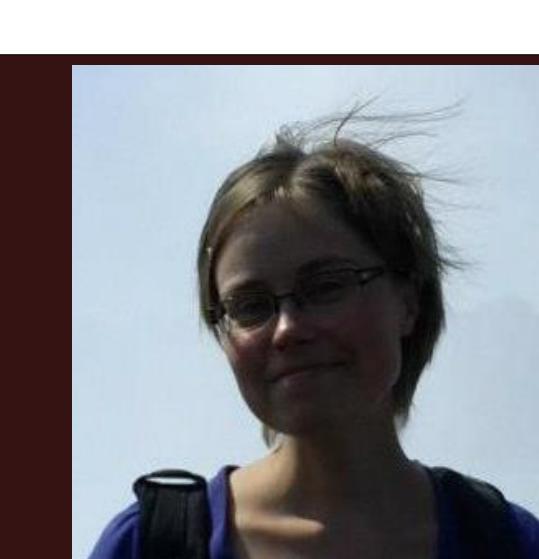
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