We seek to understand:

- how people relax
- how people interact with mobile technology
- find a way to help people relax through mobile technology
Research Method

- Questionnaire
- Interview
  - people
  - expert
- Observation
  - trace & shadowing
- Phone Diary
Research Participants

ITP Students
- Diaries
- Online questionnaire

Tech Experts
- Shawn Van Every
  Mobile Phones
- Linda Stone
  Technology
- Meir Amshik
  Religion-based meditator (Jewish)

People

Well-being Experts
- Zoran Josipovic
  Clinical Neuroscientist/
  Religion-based meditator (Buddhist)
- Saul Stepensky
  Psychiatrist-
  Child + Adolescent
- Chinese Medicine
  Acupuncturist
What did Tech Experts have to say?

- interviews
People like choice over cellphone features.
The more control they have...the less the stress associated with them will be.

Integrating a relaxation module i.e. games.

**Main takeaway:** Choice & Control
What did People have to say?

- shadows and observations
- diaries
- online questionnaire
## Diaries

(‘feelings’ around cell phone usage)

<table>
<thead>
<tr>
<th></th>
<th>Elise</th>
<th>Rod</th>
<th>Cybil</th>
<th>Mei</th>
<th>Ally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better</td>
<td>7/12</td>
<td>3/12</td>
<td>2/7</td>
<td>0</td>
<td>2/13</td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>25%</td>
<td>29%</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>Same</td>
<td>4/12</td>
<td>8/12</td>
<td>5/7</td>
<td>2/2</td>
<td>9/13</td>
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<tr>
<td></td>
<td>33%</td>
<td>67%</td>
<td>71%</td>
<td>100%</td>
<td>69%</td>
</tr>
<tr>
<td>Worse</td>
<td>1/12</td>
<td>1/12</td>
<td>0</td>
<td>0</td>
<td>2/13</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>8%</td>
<td>0%</td>
<td>0%</td>
<td>15%</td>
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</table>

**93% - Positive or non-negative feelings for all participants**  
(meaning 93% of the time participants felt good or experience no mood shift)

**In general, participants had good associations around cell phone usage**
Q1: What is the major cause of your daily stress?
- school related
- time management, too many things to do
- work, employment

Q2: Is there a specific location that causes you stress?
- school related
- work related
- inside themselves
- subway

Q3: Are there recurring events that cause you to be stressed?
- school related
- time management, too many things to do
- work, employment

Q4: How do you currently deal with your stress?
- exercise
- sleep
- substance (legal/illegal)
- tv/music
- walk
Q5: If you are not already, what would you like to do to deal with your stress?

- exercise (6)
- meditation (4)
- vacation (2)
- leisure activities (3)

Q6: What kind of situation reminds you of stress you had before?

- school (7)
- work (2)

Q7: What rituals i.e. drink tea, light candles--help to make you feel more relaxed?

- sex (3)
- exercise (2)
- drink (7)
- substance (legal/illegal) (3)
Shadowing

- Observant: Age 18~30, under grad or higher education
- Goal: understand how people relax as a ritual

Props involved

Home (personal)
- drink, snack, couch, sofa, media system, game console, lamp, candle, tea or coffee set
- ignore phone call from cell phone

Park (semi-social)
- drink, snack, blanket, iPod, umbrella, sports gears
- people doesn’t really focus on reading

Karaoke (social)
- drink(alcohol), snack, drinking game kits(e.g. dice), microphone
- people dance with pop songs
- someone just don’t yield microphone
Conclusions: Shadowing

2 Main Categories of Relaxation

• Static:
  - watch TV, see a movie, read books
  - sleep
  - listen to music

• Active:
  - Exercise, workout
  - Karaoke, dance
  - travel, vacation
What did **Wellness Experts** have to say?

- interviews
**Wellness Experts**

**Zoran Josipovic**
Clinical Neuroscientist/
Meditates regularly

**Meir Amshik**
Religion-based meditator
(Jewish)

*Biofeedback visualization.  
Galvanic skin response  
Blood pressure device  
Pulse rate  
Temperature  
Color Therapy*

“Breath deep, inhale through nose and exhale through the mouth…”

“It resets my mind when I pray…”

“When I pray I become more aware of myself.”

Main Takeaway: Seeing, Breathing & Awareness

*(A good start towards helping people manage their stress levels)*
### Conclusion: Wellness & Tech Experts

<table>
<thead>
<tr>
<th>Wellness Experts</th>
<th>Technology Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupuncture (balance energy)</td>
<td>Customization</td>
</tr>
<tr>
<td>Meditation</td>
<td>Control over features</td>
</tr>
<tr>
<td>Positive Thinking</td>
<td>Pedometer</td>
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<tr>
<td>Identify &amp; manage source of stress</td>
<td>Music</td>
</tr>
<tr>
<td>Color therapy</td>
<td>Peaceful imagery</td>
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<tr>
<td>Visualization</td>
<td>Light</td>
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<tr>
<td>Biofeedback</td>
<td>Rhythm</td>
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<td>Neurofeedback</td>
<td>Sound</td>
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</table>
Relaxation Response

**Flight or fright response elicits...**
- Increased heart rate
- Increased blood pressure
- Increase respiratory rate
- Higher pulse rate

**Relaxation response elicits...**
- Decreased heart rate
- Decreased blood pressure
- Decreased respiratory rate
- Lower pulse rate

Warmer extremities!
Market Research: What’s available?
Positive Mental State = Less Stress

(Games are a good way to help people get there)
Color Therapy
(how color influences our moods)

- Mood Card
  - test your stress
  - Let user relieve himself
  - link color & mood
Summary

- Relaxation can be achieved when we reach an alternate state of mind.
- There is a lack of awareness of being stressed.
- We have to be aware if there is a need of our user to recognize their stress or not.
- We must train the mind and body to move towards a meditative mind state.
- There is a strong relationship between physical & mental relaxation.
- We must decide who we want our target user to be, public in general or a specific group of people.