BEHAVIORAL PSYCHOMETRICS AND CUSTOMER EMPATHY

Brian Cugelman, PhD
@cugelman
YOU WILL LEARN

How to exploit the psychological vulnerabilities of these volunteers

Oli Gardner  Shanelle Mullin  Talia Wolf  Brian Cugelman  Brian Massey
What’s up for today

1. Segments and personas
2. Personality neuroscience
3. Behavioral misinformation
4. Behavioral science and design
5. Social influence
6. Behavioral design - improv
SEGMENTS AND PERSONAS
Targeting terms
Segment 11

Travel Enthusiast

- Location: International
- Age: 19 - 30
- Male: 65%
- Female: 35%

James
- The world is my temple

June Sun
- I'll go wherever the wind takes me.
PERSONALITY
NEUROSCIENCE
What is personality?

Consistency in:
- Temperament and mood
- Typical emotional response
- Cognitive disposition
- Memories and habits
- Behavior

Nature versus nurture
Genes account for about 40% of a given trait

Our personality changes a lot, during our life.

Environmental factors also shape personality.
Advances in personality science

1. THEORETICAL

- Hippocrates: Four temperaments (460 BC)
- Freud, Carl Jung & Myers-Briggs: Psychological Types (1921) & MBTI (1944)

2. PSYCHOMETRIC

- Timothy Leary: Interpersonal circumplex (1957)
- Lewis Goldberg: BIG 5 (1980s)

3. BIOLOGICAL

- Hans Eysenck: Eysenck’s personality Inventory (1950s)
- Jeffrey Alan Gray: Gray’s biopsychological theory (1970)
- C. Robert Cloninger: Temperament & Character Inventory (1980s)
- Cugelman et al: SPEAR Personality Types (2016)

- Freud, Carl Jung & Myers-Briggs: Psychological Types (1921) & MBTI (1944)
- Traditional
- Routine-Liking
- Risk-Avoiding

- Risk-Taking
- Routine-Avoiding
- Non-Traditional

SPEAR 4-40

Emotional, Compassionate, Giving
They’re a bunch of curious risk-takers.

The group leans towards analytical, but most had a good balance of social orientation too.
BEHAVIORAL MISINFORMATION
## B.S. vs. Behavior Science

<table>
<thead>
<tr>
<th>B.S. Pop Psychology (Hype)</th>
<th>Behavioral Science (Evidence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learn psychology so powerful, you must promise never to use it for evil</td>
<td>• Impacts ranged from 5-11%, but only in population X</td>
</tr>
<tr>
<td>2. You will HOOK users</td>
<td>• There was no impact 4 months into the program</td>
</tr>
<tr>
<td>3. Variable rewards will addict users</td>
<td>• Reinforcement techniques produce significant, but small impacts</td>
</tr>
<tr>
<td>4. You will learn “secret psychology”</td>
<td>• Everything we teach comes from published studies</td>
</tr>
<tr>
<td>5. Get psychological “superpowers” with our magic model</td>
<td>• Hypothetical models are often nonsense, without scientific scrutiny and testing</td>
</tr>
</tbody>
</table>
Behavior change outcomes

**Intended**
- **TARGET OUTCOME**
  - The outcome we are trying to achieve.

**Unintended**
- **DARK PATTERN**
  - Practices that are perceived as unethical or manipulative.
- **BACKFIRE RISK**
  - Unwanted outcomes, including the opposite behavior or other negative consequences.
- **UNEXPECTED BENEFITS**
  - Good outcomes that emerge by luck, but which are good accidents.

Psychological architectures

Perceived value
Social norms

Perceived value
Social comparison
Social recognition

Buy Product-X

Behavioral insights reports can take 1-6 months to complete.
Handover from Behavioral Science to Behavioral Design
Behavioral psychometrics: Automated behavioral insights

Prediction limitations
Using old /V4/ API models with lower quality SPEAR scores, and the modest ranking SPEAR40 instrument.

We still need creative thinking.
SOCIAL INFLUENCE
Does social proof describe all forms of social psychology?
7 Social Influence Principles

1. Learning
2. Comparison
3. Norms
4. Facilitation
5. Cooperation
6. Competition
7. Recognition

Prof. Stibe & Dr. Cugelman

Easy article: [https://www.alterspark.com/blog/7-principles-of-social-influence-for-digital-psychology](https://www.alterspark.com/blog/7-principles-of-social-influence-for-digital-psychology)
Social learning
People learn by seeing others perform a task.

STAYING ALIVE
“Disco can save lives.”
Social comparison (upward/downward)

People are constantly comparing themselves to others and making evaluations of higher/lower ranking.
Social norm

When unsure how to act in a situation, people observe what others are doing to determine the correct way to think, feel or behave.
Social facilitation
The mere presence of other people (real, virtual, or imagined) increases the performance of well-known tasks, but reduces the performance of unfamiliar tasks.
Cooperation
People cooperate to achieve common goals, creating a win-win context that increases group trust.
Competition
People compete when working against each other to achieve their goals, fostering a win-lose context.
Recognition
Group approval and acceptance is motivating while group rejection and disapproval are demotivating.
BEHAVIORAL DESIGN - IMPROV
Time to play, BEHAVIORAL DESIGN IMPROV

With special guests, and target audiences:

Oli Gardner  Shanelle Mullin  Talia Wolf  Brian Cugelman  Brian Massey

+ Special guest Debra
How to play

Let’s pick the following:

1. Audience
2. Conversion goal
3. Auto behavioral insights
## Group predictions

### Social hierarchy

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social comparison</td>
<td>48%</td>
</tr>
<tr>
<td>Sensitive to status</td>
<td>54%</td>
</tr>
<tr>
<td>Social recognition</td>
<td>63%</td>
</tr>
</tbody>
</table>

### Learning

<table>
<thead>
<tr>
<th>Facet</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social facilitation</td>
<td>62%</td>
</tr>
<tr>
<td>Social learning</td>
<td>55%</td>
</tr>
<tr>
<td>Social norms</td>
<td>39%</td>
</tr>
</tbody>
</table>

### Co-competition

<table>
<thead>
<tr>
<th>Facet</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>59%</td>
</tr>
<tr>
<td>Cooperation</td>
<td>69%</td>
</tr>
<tr>
<td>Competition</td>
<td>62%</td>
</tr>
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</table>

1. Audience
2. Conversion goal
3. Auto behavioral insights
Now, come up with strategies that work for diverse groups.

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For Oli and Debra, how would you apply gamification?
THANK YOU

Brian Cugelman, PhD
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AlterSpark
www.alterspark.com

Persona SPARK beta
www.personaspark.com