GAMIFICATION IN SURVEY RESEARCH:
Do The Results Support The Evangelists?

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Recap: Ongoing concerns about survey research

- Declining response rates
- Higher abandonment rates
- Disengaged respondents
- Poor quality open-ended responses
- Dissatisfied panelists
- Data quality concerns
Some more emerging concerns

- Overall decline in attention span
- Increasing use of mobile devices
- Poor data quality
Proposed solution: GAMIFICATION

Greater volume of open-ended feedback
Richer responses
Lower abandonment rates
Time spent on survey
Greater Attentiveness
Better data quality
What **is** gamification?

"I don't think you understand what 'gamification' means."
• “Gamification is the use of game thinking and game mechanics to engage users and solve problems.”

  – Ziechermann & Cunningham, 2011

Gamification by Design
The elements of game mechanics

1. A back story
2. A game-like aesthetic
3. Rules for play and advancement
4. A challenge
5. Rewards

“I think people sometimes are under the impression that we’re talking about creating video games, like Farmville or Modern Warfare 3, or that the process is complicated and requires a lot of software development.

On the contrary, gamification can be as simple as changing the way questions are worded.”

– Jon Puleston, 2012

What It Is and What It Is Not: 8 Things Everyone is Asking about Gamification
Improving questions through game elements (Puleston)

1. Question style
   • Questions should be framed in a way that makes respondents want to answer them.

2. Rules
   • Rules can be used to transform almost any task into a game.

3. Competition and reward
   • Even ordinary questions can have an element of competition added to them, such as “What are your favorite restaurants? List as many as you can in 60 seconds.”

4. Interactive elements
   • Simply replacing words with images and graphics where possible can result in better participation rates.
So... does it work?

Let's just "gamify" consumers into buying our brand of tile grout.

Badges to unlock:
- I love tile grout
- Rather be grouting
- Frequent tiler
- Mayor of tile grout

Congratulations! You've unlocked this gamification badge.

I engaged with a brand and all I got was this lousy badge.

Compete on our leader board to become "Mayor" of this lousy campaign.

This achievement is too momentous to keep from everyone I know on Facebook.

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Evidence from the literature-1

Gamification

- Volume of feedback: Supported
- Time spent on survey: Supported
- Enjoyment: Supported
- Character of data: Supported
- Perceived Ease of use: Rejected
- Perceived control: Rejected
- Concentration focus: Rejected
- Completion rate: Rejected

- Koenig-Lewis, Marquet & Palmer (2013)

The effects of gamification on market research engagement and response.
## Evidence from the literature-2

<table>
<thead>
<tr>
<th></th>
<th>Text only survey</th>
<th>Decoratively visual survey</th>
<th>Functionally visual survey</th>
<th>Gamified survey</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting</td>
<td>5.2</td>
<td>5.4</td>
<td>5.7</td>
<td>6.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Easy to read</td>
<td>6.1</td>
<td>6.3</td>
<td>6.4</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Easy to answer</td>
<td>5.99</td>
<td>6.0</td>
<td>6.3</td>
<td>6.3</td>
<td>6.1</td>
</tr>
<tr>
<td>How fast? (Self-perceived speed)</td>
<td>5.3</td>
<td>5.3</td>
<td>5.4</td>
<td>5.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>5.0</td>
<td>5.3</td>
<td>5.4</td>
<td>5.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Minutes spent in survey</td>
<td>12.7</td>
<td>13.0</td>
<td>13.8</td>
<td>15.1</td>
<td>13.7</td>
</tr>
<tr>
<td>Inconsistent response (%)</td>
<td>18</td>
<td>22</td>
<td>22</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Trap failure (%)</td>
<td>13</td>
<td>12</td>
<td>10</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Straight-lined 2 or more grids (%)</td>
<td>17</td>
<td>20</td>
<td>17</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>

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*Downes-Le Guin, Baker, Mechling & Ruyle (2012)*

Myths and realities of respondent engagement in online surveys
Should we trash gamification completely?

**WE'RE REPLACING OUR OUTDATED SYSTEM OF ANNUAL PERFORMANCE REVIEWS.**

**THE NEW SYSTEM IS CALLED GAMIFICATION. IT'S A HOT NEW TREND.**

**EMPLOYEES CAN WIN BADGES, RIBBONS, AND AWARDS FOR COMPLETING TASKS.**

**CAN WE OPT FOR THE CASH VALUE OF THOSE BADGES, RIBBONS, AND AWARDS?**

**THEY DON'T HAVE ANY CASH VALUE. OH, LIKE GARBAGE?**

**NO, NOT LIKE GARBAGE!**

**EXCEPT IN THE NARROW SENSE OF HAVING NO FUNCTIONAL, ECONOMIC, OR EMOTIONAL VALUE.**

**GARBAGE IS SOMETHING YOU THROW AWAY. HAND ME AN AWARD AND WATCH CAREFULLY**

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[Source: Dilbert.com]
• “The keys to greater survey engagement lie not in graphical enhancements or greater interactivity, but... in dealing more effectively with the fundamental components of respondent burden.

• Nevertheless, creating a more enjoyable survey experience is still a worthwhile goal even if it does not lead to all the benefits sometimes claimed.”

Myths and realities of respondent engagement in online surveys
The College Experiences Survey

Conducted by Greenwald & Associates

Sample from Research Now

Sample size n=3547 respondents

Randomly assigned to one of four types of survey.

Survey chosen for gamification because:

- Proposed questionnaire was long (estimated at 25 minutes) and wanted to keep respondents engaged
- Believed gamification elements would appeal to college students
- Client was open to the experiment
The four survey types

1. **Text only**
   - Standard text-based survey questions

2. **Photo breaks**
   - Not really a game, but an effort to provide visual breaks in-between survey sections. Calm photographs were shown between sections.

3. **Letter Finding Game**
   - Letter hunt game: Find letters at various stages in survey, unscramble at the end to reveal answer.

4. **Avatar**
   - Choose your avatar, customize him/her. Static avatar will accompany respondent through survey.
Respondents assigned to the photo breaks saw 4 photos between sections of the survey.
Those in the letter game unscrambled 6 letters for the phrase “you win”.
Respondents chose one of four avatars to accompany them through the survey
# Results from the college experiences survey

<table>
<thead>
<tr>
<th></th>
<th>Plain text (n=885)</th>
<th>Avatar (n=887)</th>
<th>Letter find game (n=892)</th>
<th>Photo breaks (n=883)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time spent in seconds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(mean)</td>
<td>5176.7</td>
<td>5538.8</td>
<td>7335.1</td>
<td>8289.3</td>
</tr>
<tr>
<td><strong>Time spent in seconds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(median)</td>
<td>1347.0</td>
<td>1431.0</td>
<td><strong>1573.0</strong></td>
<td>1329.0</td>
</tr>
<tr>
<td><strong>Percent of respondents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>who straight-lined 3 sets</td>
<td>4.0%</td>
<td>3.8%</td>
<td>3.3%</td>
<td>3.5%</td>
</tr>
<tr>
<td>of questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ability to maintain</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>concentration on survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>questions (1=Not at all</td>
<td>3.7&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.7&lt;sub&gt;a&lt;/sub&gt;</td>
<td><strong>3.8&lt;sub&gt;b&lt;/sub&gt;</strong></td>
<td>3.7&lt;sub&gt;a,b&lt;/sub&gt;</td>
</tr>
<tr>
<td>well; 5=Extremely well)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall enjoyability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of survey (1=Not at all</td>
<td>4.0&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>4.0&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>4.0&lt;sub&gt;a&lt;/sub&gt;</td>
<td><strong>4.1&lt;sub&gt;b&lt;/sub&gt;</strong></td>
</tr>
<tr>
<td>enjoyable; 5=Extremely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enjoyable)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Control variables (scores on 14 personality and attitude variables were compared to see if there were differences across methods due to measurement artifacts). **No significant differences were found.**
Comments on results

No apparent differences in data quality

Letter-find game:
- Longest median interview length
- Rated ability to concentrate slightly higher

Picture breaks:
- Longest mean interview length, but comparatively short median length. Perhaps some used this as a true break to step away.
- Survey was slightly more enjoyable than for the letter-find respondents.
Conclusions and directions for future research

- Representativeness?
- Interest level of topic?
- Mobile devices pose challenges implementing gamification
  - Data usage concerns for images
  - Inability to jot down letters for letter find game