Challenging the myths of the low income earner with a Digital Mobile Program: Reduce Your Juice

Rebekah Russell-Bennett, Rory Mulcahy, Ryan McAndrew, Tim Swinton, Jo-Anne Little and Neil Horrocks
MYTH 1
Low income groups purchase/use less products and services

MYTH 2
Low income earners are low in digital literacy and lack access to digital devices
Assumptions of low material possessions and the digital divide remain unchallenged

- Implication: it is unlikely that digital technologies will be used by social marketers for low-income target markets.

Purpose

- present evidence that digital technology can be effective for a social marketing program that is aimed at low income earners.
- This study uses the context of electricity consumption and the social marketing program of Reduce Your Juice
A digital energy saving program for young low income renters in Brisbane
Funded by the Australian Government
Research pilot to trial different approaches to energy efficiency
Results help inform future policy and development
Developed through a consortium partnership.
# Aspiration Theory

<table>
<thead>
<tr>
<th>Premise</th>
<th>Prior research</th>
<th>Gap:</th>
</tr>
</thead>
</table>
| • People with lower income levels feel frustrated with their ability to satisfy their materialistic desired compared to similar people with higher levels of income (La Barbera & Gürhan, 1997) | • It is often assumed that low income earners accept these risks and diminished lifestyles and have lower aspirations to own or purchase goods and services which are seen as luxury or nonessential (Ahuvia & Friedman, 1998).  
• Low income groups purchase and use less products and services (Sharma & Alter, 2012)  
• Low income groups use less energy (Brandon & Lewis, 1999) | • Evidence - low-income earners purchasing nonessential items  
• Multiple electrical appliances increases energy usage  
• Social marketing research has yet to provide evidence to bust the myth of the dispossessed low income earner. |
Social marketing techniques: Intervention Mix

**Product:** Digital program

**Price:** Reduced barriers of low interest and increasing benefits of energy efficiency habits

**Place:** 24/7 digital delivery

**Promotion:** SMS, video, email and Facebook

- **18-35 yo renters earning <$41k p.a.**
Theories underpinning digital program

- Theory to inform practical model.
- Behavioural learning approach and experiential learning.
3 Electricity behaviours

Community Based Social Marketing (Mackenzie-Mohr 2008)

- List of energy behaviours and habits
- Cost-saving
- Ease of change
- Penetration within target market
- Simple/complex
- Short/long term
- Repetitive
- Habitual
Cool, Switch and Wash

**Temperature Defender**
Players must defend the room temperature: use fan to blow away suns and let in the ice to keep the room at 24°.

**Power Raid**
Turn off all the light and standby switches so it doesn’t use all your juice.

**Fully Loaded**
Only wash the full cold-water baskets of washing. Avoid the hot-water items, they use more juice.
Rewards
Method

- Quasi-experimental design
- Sample:
  - Low-income (<35 yrs) renters in SEQld
  - 1001 households
  - (360 experiment vs 280 control)
- Data triangulated
  - Self-report survey (pre & post)
  - Electricity bills and KWH (pre and post)
  - Game analytics (during)

- Measures
  - Validated scales
  - Electricity data
  - Game play data

- Analysis
  - Paired T-tests
Logic model of evaluation

Inputs

What is invested
- Grant funding from Commonwealth Government
- Inkind contributions from Consortium partners
- Knowledge and experience of subject matter experts

What is done
- Market research
- Marketing strategy and implementation
- Data collection and reporting strategy
- Design and build of interactive, multi-channel digital program
- Recruitment strategy and implementation
- Rollout of Reduce Your Juice Program (Wave 1 and 2)
- Evaluation and Reporting

Outputs

Short-term results
- Energy bill savings for participants
- Improvement in attitudes, intentions and behaviours
- Provide capital upgrades of whitegoods for low income households
- Build the knowledge and capacity of consortium members
- Maximise opportunities for Australian industries to participate in the project

Outcomes

Medium-term results
- Changes in attitudes and behaviours of participants
- Sustained energy bill savings of participants
- Improve health, social welfare and livelihood of low income households
- Create evidence base to inform future energy efficiency policy and program approaches

Impact

Long-term results
- Sustained energy bill savings for participants
- Roll-out to other geographical areas etc
- Dissemination of learnings from program
- Build knowledge and capability in the energy industry
Myth 1: Low income groups purchase/use less products and services

86% believed internet access at home was a necessity

<table>
<thead>
<tr>
<th>Appliance/Device</th>
<th>Sample</th>
<th>Brisbane Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>one freezer in their household</td>
<td>96.8%</td>
<td>95%</td>
</tr>
<tr>
<td>two fridges</td>
<td>20.8%</td>
<td>33%</td>
</tr>
<tr>
<td>one washing machine in the household</td>
<td>96.2%</td>
<td>97%</td>
</tr>
<tr>
<td>one clothes dryer in their household</td>
<td>54.4%</td>
<td>57%</td>
</tr>
<tr>
<td>split system air con</td>
<td>37.5%</td>
<td>73%</td>
</tr>
<tr>
<td>cooling systems in their household</td>
<td>60.4%</td>
<td>73%</td>
</tr>
</tbody>
</table>
Myth 2. Low income earners are low in digital literacy and lack access to digital devices

<table>
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<tr>
<th>Appliance/Device</th>
<th>Sample</th>
<th>Brisbane Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own a gaming console</td>
<td>72.5%</td>
<td>76%</td>
</tr>
<tr>
<td>Own at least one laptop</td>
<td>81.5%</td>
<td>76%</td>
</tr>
<tr>
<td>Own at least one tablet in their household</td>
<td>73%</td>
<td>48%</td>
</tr>
<tr>
<td>Own a desktop computer in their household</td>
<td>34.7%</td>
<td>63%</td>
</tr>
<tr>
<td>two or more smartphones in household</td>
<td>71.9%</td>
<td></td>
</tr>
</tbody>
</table>
## Did it work?

### Summary Results Table

<table>
<thead>
<tr>
<th>Summary Results Table</th>
<th>Intervention Group (RYJ participants)</th>
<th>Change</th>
<th>Control group</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity bill savings (pre and post intervention period)</td>
<td>10.95% reduction</td>
<td>✓</td>
<td>5.87% reduction</td>
<td>✗</td>
</tr>
<tr>
<td>Habits</td>
<td>22.52% improvement</td>
<td>✓</td>
<td>9.73% improvement</td>
<td>✗</td>
</tr>
<tr>
<td>Attitudes</td>
<td>9.08% improvement</td>
<td>✓</td>
<td>1.29% improvement</td>
<td>✗</td>
</tr>
<tr>
<td>Intentions</td>
<td>15.56% improvement</td>
<td>✓</td>
<td>1.27% improvement</td>
<td>✗</td>
</tr>
<tr>
<td>Knowledge</td>
<td>5.02% improvement</td>
<td>✓</td>
<td>0.08% improvement</td>
<td>✗</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>10.42% improvement</td>
<td>✓</td>
<td>1.39% improvement</td>
<td>✗</td>
</tr>
<tr>
<td>Bill control</td>
<td>9.81% improvement</td>
<td>✓</td>
<td>0% change</td>
<td>✗</td>
</tr>
<tr>
<td>Giving up comfort</td>
<td>14.06% Improvement</td>
<td>✓</td>
<td>3.25% improvement</td>
<td>✗</td>
</tr>
</tbody>
</table>

$54.82$ average saving on quarterly electricity bills ($219.28$ annual saving)

12.3% improvement in energy consumption on previous year

“My children are now on board and turn lights off and make sure the power points are turned off at night its great”

“Great way to learn”

“It was helpful and a fun way to learn”

“It’s so easy to do and you get great tips along the way”

“Opens your eyes to what is more important and how easy it can be to save”
Key Learnings

- Delivering innovation: Ideas are easy. Implementation is hard.
- Managing the language and priorities of partners
- Customer centric vs data-driven approach
- Defining the low income earner
- Question the myths and assumption
- Go beyond the individual
Want more info?

@DrBekMarketing

rebekah.bennett@qut.edu.au