Conference Proceedings

International Social Marketing Conference: “Broadening Cultural Horizons in Social Marketing”

James Cook University, Singapore

15-17 July 2018
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Evaluating the effectiveness of a brief versus a comprehensive alcohol social marketing program

James Durl, Timo Dietrich, Krzysztof Kubaki

Declare or dispose: New Zealand’s Border Compliance Social Marketing Programme

Phill Sherring

Behaviour or behavioural change?

Patricia David, Professor Sharyn Rundle-Thiele

Is perception reality in consumer dominant value creation?

Nadia Zainuddin & Rory Mulcahy

Paper Session: Individual Group Community and/or Organisational Wellbeing

Red Flag Gambling Behaviours: A Public Health Campaign

Tennele Shields and Nicola Coalter

Cultural Differences in Students’ Perceived Barriers to Low-Risk Drinking: A Comparison between New Zealand and Vietnam

Mr Khai T Tran, Dr Kirsten Robertson & Dr Maree Thyne

‘Make It Count’ 2018

Kathy Knox, Ali Ahani, Joy Parkinson

Broadening Cultural Horizon in Social Marketing: Upaya meningkatkan kesadaran laki-laki untuk melakukan konseling (Male engagement through increased awareness for men’s counselling) – A Case Study of Pulih Foundation

Nirmala Ika Kusumaningrum and Irma S. Martam

Is health information in magazines really healthy?

Amy Wilson, Regan Mahoney, Callum Davies, Genevieve Pearce, Svetlana Bogomolova

Paper Session: Creating and Accessing Value

The role of Behaviour Centred Design in creating value to sustain impact of social marketing: evidence and experience from Indonesia, Timor-Leste and Bangladesh

Nicholas Goodwin

Creating value and sustaining impact in WASH: insights from the Partnership for Human Development program in Timor-Leste

Lamberto Pinto, Moran Heather and Nicholas Goodwin

Is there still a stigma associated with having a disability and what can marketers do to reduce it?

Melanie Randle and Christine Metusela

Religious References in Health Campaigns: Perceptions and Motives

Marwa Al Hinai and Mary Brennan
Incorporating social marketing into healthcare facilities management in Ghana: A proposed framework

Oti Amankwah, Choong Weng Wai and Abdul Hakim Mohammed

Mental Health, Alcohol and Other Drugs: After Hours Crisis Communication and Marketing Initiative

Carolyn Loton and Melissa Neal

Conference Proceedings: Day 2

Keynote Speaker: Marieke Bink

Keynote Speaker: Choong Weng Wai

Special Session: Synthesizing Benchmarks and Planning Steps

Special Session: Macro Social Marketing

Paper Sessions: Day 2

The family tension that is Type 1 diabetes

Rachel Peile, Mike Reid & Lisa Farrell

Comparing (user profiles) of apples with apples

Zachary Anesbury, Danielle Talbot, Tim Bogomolov, Chanel Day & Svetlana Bogomolova

Using Social Marketing to Reduce Salt Intake: A field Trial in Iran

Mohsen Shams, Mehdi Layeghi Asl, JanMohammad Malekzadeh, Mostafa Maleki

Effectiveness of Stages-of-Change Model on Declaration of Intent for Organ Donation

Yoko Uryuhara

The use of cannabis seeds as a natural contraceptive: A case of Zambia

Lucy Nyundo, Lynne C. Eagle, David R. Low, Maxine Whittaker and Dickson Mwansa

Paper Session: Non Mainstream Communities and Groups

What are you waiting for? Understanding young Adults’ obstacles to organ donation discussion

Kathy Knox, Joy Parkinson, Ali Ahani

Recognition and adoption of idealised attractiveness types by boys: A developmental perspective

Graham Ferguson and Sonia Dickinson-Delaporte

Social marketing and the implementation of the National Disability Insurance Scheme

Jodie Kleinschafer Felicity Small and Mona Nikidehaghani

Examining the relationship between charity touchpoints and monetary support

Margaret Faulkner, Cathy Nguyen and Leah McGeorge

Trust, transparency and some tricky conversations – navigating a successful partnership for a private sector social marketing campaign

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Introduction

The Australian Association of Social Marketing (AASM) International Social Marketing Conference (ISMC) is a biannual conference and was hosted by James Cook University, Singapore from 15-17 July 2018. The conference programme included a Doctoral Colloquium held on 17 July 2018, with the main conference running from 15-16 July 2018. The conference theme of “Broadening Cultural Horizons in Social Marketing” was widely promoted by the AASM and James Cook University through their respective channels.

Conference Theme

The International Social Marketing Conference (ISMC) brings together a community of professionals in the Asia-Pacific region across multiple disciplines including marketing, psychology, public health, policy change, geography, environmental sciences, economics, and sociology who are working in social change.

The focus of ISMC is on understanding how we can influence people’s health, environmental, and lifestyle behaviours, and the socio-cultural factors, policies, and structures that influence these behaviours, for greater societal wellbeing.

ISMC 2018 had a general theme on “Broadening Cultural Horizons in Social Marketing”. The focus was on bringing ideas on social change from around the Asia-Pacific into the social marketing community.

Delegates were encouraged to submit papers and present case studies on any topic relevant to social marketing and social change. We particularly encourage papers that identify the unique challenges around behaviour and social change across the Asia-Pacific, and showcase successful social marketing interventions across the region.

Peer Review

All papers and case studies presented at this internationally significant conference were submitted to an independent double blind peer review by qualified experts to meet HERDC E1 Publication Criteria prior to acceptance to the ISMC 2018 Conference. The proceedings are available at http://www.ismconference.com.au/Past_Conferences.

Committee Structure

The conference was managed by and organising committee comprising of:

- Associate Professor Abhishek Bhati, James Cook University, Singapore – Co-Chair
- Professor Lynne Eagle, James Cook University, Australia – Co-Chair
- Assoc. Professor Ross Gordon, Macquarie University, Australia – Chair AASM
- Dr Rachel Hay, James Cook University, Australia – Conference Coordinator
- Dr Pengji Wang, James Cook University, Singapore, - Logistics and Organisation
- Ms Nurhidayah Ekbal, James Cook University, Singapore – Venue and Accommodation
- Dr Choong Weng Wai, Universiti Teknology Malaysia – Committee Member
- Dr Ann-Marie Kennedy, University of Canterbury, New Zealand – Committee Member
- Dr Sheau ting Low, Universiti Teknology Malaysia – Committee Member
- Ms Pamela Pilapil, Wildheart Inc – Committee Member
Expert Reviewer Panel

Full papers and extended abstracts underwent a double blind peer review and were edited prior to publication. ISMC 2018 would like to thank the following expert reviewers:

Mr Mohammed Alduayji, University of Western Australia
Dr Michael Basil, University of Lethbridge, Canada
Ms Sarah Beasley, Cancer Council Western Australia
Mr Saunak Bhattacharyya, Indian Institute of Technology (ISM), Dhanbad, India
Ms Alison Bock, Queensland Health, Australia
Ms Tracey Bridges, Portchester Consulting, New Zealand
Dr Julia Carins, Griffith University, QLD Australia
Dr Weng Wai Choong, Universiti Teknologi, Malaysia
Ms Rebe Cook, Cancer Council, VIC, Australia
Ms Patricia David, Griffith University, QLD Australia
Prof Lynne Eagle, James Cook University, QLD Australia
Dr Nicholas Goodwin, Tulodo, NSW Australia
Dr Rachel Hay, James Cook University, QLD Australia
Dr Mohammad Kadir, Griffith University, QLD Australia
Dr Ann-Marie Kennedy, University of Canterbury, New Zealand
Prof Roger Layton, University of New South Wales, Australia
Dr Sheau Ting Low, Universiti Teknologi, Malaysia
Ms Jane Martin, Department of Health Queensland, Australia
Dr Jane McKay-Nesbitt, Bryant University, USA
Dr Mehmet (Michael) Mehmet, Charles Sturt University, NT Australia
Mr Cuong Pham, Griffith University, QLD Australia
Dr Maria Raciti, University of the Sunshine Coast, QLD Australia
Ms Nicole Richards, Ehrenberg-Bass Institute, University of South Australia
Prof Sharyn Rundle-Thiele, Griffith University, QLD Australia
Dr Bijaya Prakash Sainju, Concern for Children and Environment, Nepal
Dr Geoff Smith, Step Back Think, NSW Australia
Dr Dao Truong, North-West University, South Africa
Mr Luke van der Beeke, Marketing for Change, NSW Australia
Ms Taylor Willmott, Griffith University, Australia
Ms Amy Wilson, Ehrenberg-Bass Institute, University of South Australia, Australia
Dr Nadia Zainuddin, Wollongong University, NSW Australia
Conference Venue

The Singapore campus of James Cook University is fully owned by James Cook University Australia, which is ranked in the top 2% of universities in the world. James Cook University Australia established its Singapore campus in 2003 as part of its expressed intent of internationalising its activities and offers a suite of university level programs at the Singapore campus covering the areas of Business, Information Technology, Psychology, Education, Accounting, Arts, Aquaculture, Environmental Science, Games Design, Tourism and Hospitality.

James Cook University offers Higher Degree by Research programs such as Doctor of Philosophy, Master of Philosophy and pathways to a higher degree.

Additionally, the campus offers courses at the pre-university level, specifically designed to provide pathways for students who are unable to immediately meet university entrance standards.

The Singapore campus of James Cook University is located at Sims Drive. The campus provides students with access to a full range of facilities and services to support their learning. These include lecture and seminar rooms, library and associated study facilities, computer laboratories, financial lab and access to a variety of sporting facilities.
Call for Papers

The call for papers was first released in June 2017 to the AASM membership, and via James Cook University’s communication channels. This was followed by an online call for papers, with an initial closing date for submissions as 24 November 2017. The closing date was extended to 16 February 2018. Eighty-one papers were received. Three papers were rejected as they did not fit the theme of the conference and seventeen were withdrawn, with the authors stating financial status as the reason. The scholarly submissions meet HERDC and ERA requirements. Authors of accepted papers were asked to nominate if they wish to have their abstract (EX) or full paper (E1) published in the proceedings. In the absence of advice from the author, the full paper is published.

The 2018 International Social Marketing Conference (ISMC) invited paper submissions for both the academic and industry/practitioner tracks. The general theme of the conference was “Broadening Cultural Horizons in Social Marketing”. The focus was on bringing ideas on social change from around the Asia-Pacific into the social marketing community. Delegates are encouraged to submit academic and practitioner papers on any topic relevant to social marketing and social change. We particularly encourage papers that identify the unique challenges around behaviour and social change across the Asia-Pacific, and showcase successful social marketing interventions across the region.

Authors were asked to submit a two page paper for ISMC review. These guidelines have been developed to meet E1 publication Criteria1. ISMC Papers should be two pages long, with a strict maximum of five pages including references, appendices, and title page.

Possible topic areas included, but were not limited to the following:

- The influence of religion, social factors, or culture on social marketing and social change
- Opinion pieces
- Critical reviews
- Conceptual papers
- Discussion points
- Critical social marketing
- Unintended consequences from social marketing
- When social marketing programmes fail
- Advancing theory in social marketing
- Trans-disciplinary behaviour & social change
- Innovative and new research methods in social marketing and social change research
- Individual, group, community, and/or organisational wellbeing
- Non-mainstream communities and groups
- Undeveloped, under-developed, developing, and non-first world societies
- Systems social marketing
- Policy, legislation, and upstream social marketing
- Transformative services and midstream social marketing
- Health and wellbeing
- Technology and new media
- Environment and sustainability
- Charity and not-for-profit
- Licit and illicit substance (ab)use
# Conference Program

**Day 1: Sunday 15th July 2018**

<table>
<thead>
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<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00am</td>
<td>Registration</td>
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<tr>
<td>Venue: Outside Block A – Entry to JCU</td>
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<tr>
<td>8:45am</td>
<td>Welcome and Overview: Associate Professor Abhishek Bhati, Dean, JCU Singapore</td>
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<tr>
<td>Venue: C2-15</td>
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<tr>
<td>8:50am</td>
<td>Welcome: Professor of Marketing Lynne Eagle, JCU Australia</td>
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<tr>
<td>Venue: C2-15</td>
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<tr>
<td>9:00am</td>
<td>Opening Address: Bruce Gosper, Australian High Commissioner to Singapore</td>
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<td>Venue: C2-15</td>
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<tr>
<td>9:15am</td>
<td>Keynote Speaker: Bernard Harrison, Consultant Bernard Harrison &amp; Friends</td>
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<td>Venue: C2-15</td>
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<tr>
<td>9:45am</td>
<td>Questions and Discussion facilitated by Abhishek Bhati</td>
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<td>Venue: C2-15</td>
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<tr>
<td>9:55am</td>
<td>Keynote Speaker: Teo Ser Luck, Member of Parliament Singapore</td>
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<tr>
<td>Venue: C2-15</td>
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<tr>
<td>10:25am</td>
<td>Questions and Discussion facilitated by Abhishek Bhati</td>
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<td>Venue: C2-15</td>
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<tr>
<td>10:35am</td>
<td>Morning Tea</td>
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<td>Venue: State of the Tropics Pavilion</td>
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## Session 1

<table>
<thead>
<tr>
<th>Environment and Sustainability Session Chair: Ross Gordon</th>
<th>Advancing theory in social marketing Session Chair: Carina Roemer</th>
<th>Special Session 1</th>
<th>Individual Group Community and/or Organisational Wellbeing Session Chair: Amy Wilson</th>
<th>Creating and Accessing Value Session Chair: Nicholas Goodwin</th>
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<tr>
<td>C2-15</td>
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<tr>
<td>11:00am</td>
<td>Aziemah Othman and Dr Robyn Ouschan</td>
<td>Anna Kitunen, Di Robertson, Sharyn Rundle-Thiele and Julia Carins</td>
<td>Ethics in Social Marketing Facilitators: Krzysztof Kubacki and Lynne Eagle</td>
<td>Tennele Shields and Nicola Coalter</td>
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<td>Australian advertising codes for posting alcohol messages on social media: What do young adults think?</td>
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<td>Red Flag Gambling Behaviours: A Public Health Campaign</td>
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<td>Charvi Sharma, Thomas Vineeta and Asha Surendran</td>
<td>Taylor Willmott and Sharyn Rundle-Thiele</td>
<td>Khai T. Tran, Kirsten Robertson and Maree Thyne</td>
<td>Cultural Differences in Students’ Perceived Barriers to Low-Risk Drinking: A Comparison between New Zealand and Vietnam</td>
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<td>The Effectiveness of Public Information Advertisements among Young Adults in Singapore</td>
<td>Advancing social marketing: A reciprocal 4-step theory application process (TITE)</td>
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<tr>
<td>11:40am</td>
<td>Ross Gordon, Theresa Harada and Gordon Waitt</td>
<td>Tani Khara and Margaret Nowak</td>
<td>Kathy Knox, Ali Ahani and Joy Parkinson</td>
<td>‘Make It Count’ 2018</td>
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| Session 1 | Environment and Sustainability  
Session Chair: Ross Gordon | Advancing theory in social marketing  
Session Chair: Carina Roemer | Special Session 1  
| Individual Group Community and/or Organisational Wellbeing Session Chair: Amy Wilson | Creating and Accessing Value  
Session Chair: Nicholas Goodwin |
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| **12:00pm** | Mehmet (Michael) Mehmet, Russell Roberts, Tahmid Nayeem, Sarah Hyde, Oliver Burmeister and Chris Maylea  
Equally Well: A Consumer-Centric Implementation Model | Nirmala Ika Kusumaningrum and Irma S. Martam  
Upaya meningkatkan kesadaran laki-laki untuk melakukan konseling (Male engagement through increased awareness for men’s counselling) – A Case Study of Pulih Foundation |
| **12:20pm** | Amy Wilson, Regan Mahoney, Callum Davies, Genevieve Pearce and Svetlana Bogomolova  
Is health information in magazines really healthy? |
| **12:40pm** | Questions and Discussion | Questions and Discussion | Questions and Discussion | Questions and Discussion | Questions and Discussion |
| **1:00pm** | Lunch: ISMC AGM / Board Meeting  
Venue: Koi Garden  
Venue: C2-15 |
| **2:00pm** | AASM Special Session: A Regional Social Marketing Association for the Asia-Pacific Region?  
- Facilitated by - Joy Parkinson, Nadia Zainuddin, Ross Gordon |
| **ALL CONFERENCE DELEGATES REQUESTED**  
Round Table Discussion - Proposal for a Regional Social Marketing Association |
<p>| <strong>Venue</strong> | C2-04 |
| <strong>3:00pm</strong> | Afternoon Tea |</p>
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<th>Venue: State of the Tropics Pavilion</th>
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| Session 2 | Panel Session | Advancing theory in social marketing  
Session Chair: Nadia Zainuddin | Environment and sustainability  
Session Chair: Lynne Eagle | Individual group community and/or organisational wellbeing  
Session Chair: Carolyn Loton | No Session |
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</table>
| 3:30pm    | Critical Issues in Social Change in the Asia-Pacific Chair: Ross Gordon  
- Panel Members -  
Nathaly Aya Pastrana Gender, culture and social change (including reference to the COHESION project Nepal)  
Irma Martam Domestic violence and gender equality social change programmes in Indonesia | James Durl, Timo Dietrich and Krzysztof Kubacki  
Evaluating the effectiveness of a brief versus a comprehensive alcohol social marketing program young urban Indians towards ethical foods and ways to foster trust | Linda Brennan, Karen Klassen, Dang Nguyen, Shinyi Chin and Mike Reid  
Engaging with young adults about nutrition using social media | Melanie Randle and Christine Metusela  
Is there still a stigma associated with having a disability and what can marketers do to reduce it? |                       |
| 3:50pm    |                | Phill Sherring  
'Declare or dispose' - New Zealand's Border Compliance Social Marketing Programme | Niek Monika Kulsum  
Social Marketing Communication to reduce road traffic accident by changing behaviour of young driver in Indonesia | Marwa Al Hinai and Mary Brennan  
Religious References in Health Campaigns: Perceptions and Motives |                       |
| 4:10pm    | Nicholas Deroose Social activism and representing the LGBTIQ community in Singapore  
Tom Carroll Cultural and political | Patricia David and Sharyn Rundle-Thiele  
Behaviour or behavioural change? | Muhammad Abid Saleem, Lynne Eagle and David Low  
Environmental values and eco-socially conscious consumer behaviour: does spirituality say anything? | Oti Amankwah, Choong Weng Wai and Mohammed Abdul Hakim  
Incorporating Social Marketing into the Healthcare Facilities Management in Ghana: A Proposed Framework |                       |
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<th>Time</th>
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<tr>
<td>4:30pm</td>
<td><strong>challenges in public health change programmes across Asia</strong></td>
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<td>Nadia Zainuddin and Rory Mulcahy</td>
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<td>Carolyn Loton and Melissa Neal</td>
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<td>Lynne Eagle, Breda McCarthy and David Low</td>
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<td><strong>Winds of Change: A Study of the Acceptability of Renewable Energy in Regional</strong></td>
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<td>Carolyn Loton and Melissa Neal</td>
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<td><strong>Mental Health, Alcohol and Other Drugs: After Hours Crisis Communication and Marketing Initiative</strong></td>
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<tr>
<td>4:50pm</td>
<td>Questions and Discussion</td>
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<tr>
<td>5:00pm</td>
<td>Day 1 Wrap up, Session Chair: Lynne Eagle</td>
</tr>
<tr>
<td>5:45pm</td>
<td>Bus leaves for Conference Dinner – Pre-Dinner Drinks at Skysuites Equinox of Swissotel – Meet for bus near the Registration Desk</td>
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<tr>
<td>7:15pm</td>
<td><strong>Conference Dinner and Awards: Skysuites Equinox of Swissotel, The Stamford, Singapore (2 Stamford Road, Singapore)</strong></td>
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<tr>
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<td>Announcement of ISMC 2020 Host and Location:  Assoc.Prof Ross Gordon and 2020 host</td>
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**Day 2: Monday 16th July 2018**

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<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00am</td>
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<td><strong>Venue:</strong> Outside C2-15</td>
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<tr>
<td>8:45am</td>
<td><strong>Welcome and Overview:</strong> Associate Professor Abhishek Bhati, JCU Singapore, Campus Dean</td>
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<td><strong>Venue:</strong> C2-15</td>
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<tr>
<td>8:55am</td>
<td><strong>Welcome:</strong> Assoc. Prof. Ross Gordon, President, AASM</td>
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<td><strong>Venue:</strong> C2-15</td>
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<td>9:00am</td>
<td><strong>Keynote Speaker:</strong> Ms Marieke Bink, CEO, Cycling Without Age</td>
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<td>9:30am</td>
<td>Questions and Discussion, <strong>Facilitated by Lynne Eagle</strong></td>
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<td>9:40am</td>
<td><strong>Keynote Speaker:</strong> Dr Choong Weng Wai, Universiti Teknologi Malaysia</td>
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<td>10:30am</td>
<td><strong>Morning Tea</strong></td>
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<td><strong>Venue:</strong> Outside C2-15</td>
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## Session 3 - Health and wellbeing

**Session Chair:** Lucy Nyundo

- **11:00am**
  - **C2-15**
  - **Rachel Peile**, Mike Reid and Lisa Farrell
    - The family tension that is type 1 diabetes
  - **Kathy Knox**, Joy Parkinson and Ali Ahani
    - What are you waiting for? Young Adults’ obstacles to organ donation discussion
  - **Nikki Harrison**, Amy Wilson and Camille Short
    - How marketing may be used to increase the recruitment of Men in health research: A case study of the men’s Health Register in South Australia

- **11:20am**
  - **A2-03**
  - **Zachary Anesbury**, Danielle Talbot, Tim Bogomolov, Chanel Day and Svetlana Bogomolova
    - Comparing (user profiles) of apples with apples
  - **Graham Ferguson** and Sonia Dickinson-Delaporte
    - Recognition and adoption of idealised attractiveness types by boys: A developmental perspective
  - **Hiep Cong Pham**, Minh Nhat Nguyen, Irfan Ulhaq, Mathews Nkhoma and Linda Brennan
    - Transforming Cyber-Security Compliance: Gamification & Experiential Learning

- **11:40am**
  - **A2-04**
  - **Mohsen Shams**, Mehdi Layeghiasl, Jamshadimad Malekzadeh and Mostafa Maleki
    - Using Social Marketing to Reduce Salt Intake: A field Trial in Iran
  - **Jodie Kleinschafer**, Felicity Small and Mona Nikidehaghani
    - Social marketing and the implementation of the National Disability Insurance Scheme
  - **Carina Roemer** and Prof Sharyn Rundle-Thiele
    - Assessing written communication readability: Will the message be received?

- **12:00pm**
  - **A2-05**
  - **Yoko Uryuhara**
    - Effectiveness of Stages-of-Change Model on Declaration of Intent for Organ Donation
  - **Margaret Faulkner**, Cathy Nguyen and Leah McGeorge
    - Examining the relationship between charity touchpoints and monetary support

**Special Session 2 - Non-mainstream communities and groups

**Session Chair:** Jodie Wrigley

- **11:00am**
  - **A2-03**
  - **Carina Roemer**
    - Trans-disciplinary research in social change

**Session Chair:** Carina Roemer

- **11:20am**
  - **A2-04**
  - **Rachel Peile**
    - Virtual Session Chair: Rachel Hay
    - Non-mainstream communities and groups

**Session Chair:** Jodie Wrigley

- **11:40am**
  - **A2-05**
  - **Trans-disciplinary research in social change

**Session Chair:** Carina Roemer

- **12:00pm**
  - **A2-06**
  - **Advancing Theory in Social Marketing

**Virtual Session Chair:** Rachel Hay

Presenters in the virtual session will Zoom into room A2-06 to present their paper live. The audience will be able to ask questions at the end of the presentation.
<table>
<thead>
<tr>
<th>Session</th>
<th>Special Session</th>
<th>Topic</th>
<th>Session Chair</th>
<th>Date</th>
<th>Time</th>
<th>Presentations</th>
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<tbody>
<tr>
<td>Session 3</td>
<td>Special Session 2</td>
<td>Health and wellbeing</td>
<td>Lucy Nyundo</td>
<td>12:20pm</td>
<td>12:20pm-12:40pm</td>
<td>The use of cannabis seeds as a natural contraceptive: A case of Zambia, Trust, transparency and some tricky conversations – navigating a successful partnership for a private sector social marketing campaign</td>
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<td>Non-mainstream communities and groups</td>
<td>Jodie Wrigley</td>
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<td>Trans-disciplinary research in social change</td>
<td>Carina Roemer</td>
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<td>Advancing Theory in Social Marketing</td>
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<td>Session 4</td>
<td>Special Session 3</td>
<td>Innovative and new research methods in social marketing and social change research</td>
<td>Sharyn Rundle-Thiele</td>
<td>2:00pm</td>
<td>2:00pm-2:20pm</td>
<td>Can serious games reduce excessive drinking intentions among Australian secondary school students?</td>
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<td>Transformative services and midstream social marketing</td>
<td>Carolyn Loton</td>
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<td>2:20pm</td>
<td></td>
<td>Linda Brennan, Shinyi Chin and Mike Reid &lt;br&gt; It Takes a Village: Co-creation and Co-design for Social Media Health Promotion</td>
<td>Carolyn Loton, Justine Gowland-Ella, Jane Whatnall and Wendy Harris&lt;br&gt;Packaging the message well: a game based approach to reduce sugary drinks consumption in the early high school years</td>
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<td>2:40pm</td>
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<td>Jeawon Kim, Kathy Knox, Samuel Hodgkins and Sharyn Rundle-Thiele &lt;br&gt;Outcome evaluation of an empirical study: Consumer insight driven food waste social marketing pilot</td>
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<td>3:00pm</td>
<td>Questions and Discussion</td>
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<td>3:20pm</td>
<td>Afternoon Tea &lt;br&gt;Venue: Outside C2-15</td>
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</table>
| Session 5  | Doctoral Colloquium Preview Session | Innovative and new research methods in social marketing and social change research  
Session Chair: Mehmet (Michael) Mehmet | Policy legislation and upstream social marketing  
Session Chair: Joy Parkinson | No Session | No Session |
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<td>Venue</td>
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</table>
| 3:40pm    | **Carina Roemer and Sharyn Rundle-Thiele**  
From paddock to reef. Adopting social marketing to change on-farm management to improve water quality | **Cuong Pham, Sharyn Rundle-Thiele, Julia Carins and Larissa Cahill**  
Applying a Systems Lens to Defence Evaluations | **Sarah Forbes and Holly Birkett**  
The Social Ecological Model of Social Marketing Competition: An examination of Shared Parental Leave uptake |  | |
| 4:00pm    | **Ryan Storr, Julia Carins and Sharyn Rundle-Thiele**  
Social marketing and the food environment: a multi-stream time-series intervention study | **Mehmet (Michael) Mehmet, Peter Simmons and Rodney Clarke**  
Sharks, Social Sentiment and Science | **Rory Mulcahy and Joy Parkinson**  
The importance of identifying macro level unintended consequences |  | |
| 4:20pm    | **Amy Wilson**  
How healthy habits grow: Expanding marketing empirical generalisations to physical activity |  |  |  | |
| 4:40pm    | Questions and Discussion | Questions and Discussion | Questions and Discussion |  | |
| 5:00pm    | **Conference Close: Assoc. Prof Ross Gordon, President AASM**  
Venue: C2-15 |  |  |  | |
| 5:10 - 7:00pm | **Post Conference Cocktail Function**  
Venue: Multi-Purpose Hall  
Dress: Smart Casual |  |  |  | |
# Day 3: Tuesday, 17th July 2018

## Doctoral Colloquium

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>8:30am</td>
<td><strong>Registration</strong>&lt;br&gt;Venue: Outside C2-15</td>
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<tr>
<td>8:45am</td>
<td><strong>Welcome and Overview:</strong>&lt;br&gt;Associate Professor Abhishek Bhati, <em>Dean, JCU Singapore</em> and Professor of Marketing Lynne Eagle, <em>JCU Australia</em>&lt;br&gt;<strong>Doctoral Colloquium, Facilitators:</strong> Assoc. Professor Ross Gordon, Professor Lynne Eagle, Assoc. Professor Svetlana Bogomolova, Dr Nadia Zainuddin, Associate Professor Abhishek Bahti, Dr Choong Weng Wai&lt;br&gt;Venue: C2-15</td>
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<tr>
<td>9:00am - 10:30am</td>
<td><strong>Carina Roemer</strong> and Sharyn Rundle-Thiele&lt;br&gt;From paddock to reef. Adopting social marketing to change on-farm management to improve water quality**&lt;br&gt;<strong>Ryan Storr</strong>, Julia Carins and Sharyn Rundle-Thiele&lt;br&gt;Social marketing and the food environment: a multi-stream time-series intervention study**&lt;br&gt;<strong>Amy Wilson and</strong> Svetlana Bogomolova, Cathy Nguyen, Timothy Olds and Byron Sharp&lt;br&gt;<strong>How healthy habits grow:</strong> Expanding marketing empirical generalisations to physical activity</td>
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<td>10:30am</td>
<td><strong>Supervision and Supervisors including Conflict Resolution</strong> - Prof Lynne Eagle -</td>
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<td>10:45am</td>
<td><strong>The publication game</strong> - Dr Nadia Zainuddin -</td>
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<td>11:00am</td>
<td><strong>Identifying a Topic</strong> - Dr Svetlana Bogomolova -</td>
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<tr>
<td>11:15am</td>
<td><strong>Research Ontology and Epistemology</strong> - Assoc. Prof Ross Gordon -</td>
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<tr>
<td>11:30am</td>
<td><strong>Issues with Research Methodology</strong> - Assoc. Prof Ross Gordon -</td>
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<tr>
<td>11:45am</td>
<td><strong>Contemplating Commencing a PhD? Career Pathways Info Session</strong> - Associate Professor Abhishek Bhati -</td>
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<tr>
<td>12:00pm</td>
<td><strong>Research Round Robin</strong>&lt;br&gt;<strong>Supervision and Supervisors including Conflict Resolution</strong> - Prof Lynne Eagle -&lt;br&gt;<strong>Issues with Research Methodology</strong> - Assoc. Prof Ross Gordon -&lt;br&gt;<strong>The Publication Game</strong> - Dr Nadia Zainuddin -&lt;br&gt;<strong>Theorising</strong> - Dr Svetlana Bogomolova -&lt;br&gt;<strong>Research Ontology and Epistemology</strong> - Assoc. Prof Ross Gordon -&lt;br&gt;<strong>Contemplating Commencing a PhD? Career Pathways Info Session</strong> - A/Prof Abhishek Bhati</td>
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<td>12:20pm</td>
<td><strong>Questions and Discussion</strong> - All Facilitators -</td>
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<td>12:30pm</td>
<td><strong>Doctoral Colloquium Close</strong>&lt;br&gt;Venue: C2-15&lt;br&gt;Optional Walking Tour: Guided walking tour of historical district for more information <a href="http://www.visitsingapore.com/walking-tour/">http://www.visitsingapore.com/walking-tour/</a></td>
</tr>
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</table>
Conference Proceedings: Day 1

Opening Address: Bruce Gosper
Australian High Commissioner

Bruce Gosper was previously CEO of Austrade, the Australian Government agency responsible for promoting trade, investment and international education, and tourism policy, programs and research. Prior to Austrade, Mr Gosper was Deputy Secretary with the Department of Foreign Affairs and Trade and Australia’s senior trade policy official, responsible for all trade negotiations.

Keynote Speaker: Bernard Harrison
Principal Partner, Creativity and Design, Bernard Harrison and Friends

Bernard Harrison was the executive director of the Singapore Zoo from 1981 to 2002, and the CEO of Wildlife Reserves Singapore from 2000 to 2002. Today he runs a zoo consultancy business, Bernard Harrison & Friends, with his wife in Bali, where he advises on creative zoo design and ecotourism. A bigwig in the international zoo scene, he is credited with putting the Singapore Zoo on the global map, having conceptualized the Night Safari, as well as the “open zoo” concept—which showcases animals as free-roaming within their enclosures.

Special Session: Ethics in Social Marketing
Krzysztof Kubacki and Lynne Eagle

This session will focus on reviewing past and current research into ethical challenges faced by Social Marketers and preferences for resources to support ethical decision making. It will then focus on critically reviewing draft terms of reference for a Social Marketing Ethics Expert Panel (SMEEP) which, with the endorsement of the major Social Marketing organisations, will:

- Develop a set of key ethical principles which will provide foundation for a future social marketing code of conduct/ethics to guide effective and ethical practice in social marketing
- Make recommendations on the process of how social marketing organisations can develop a social marketing code of conduct/ethics
- Contribute to building the evidence-base for a future social marketing code of conduct/ethics
**Special Session: Creating and Accessing Value**  
*Nicholas Goodwin and Lamberto Pinto*

This session will discuss how social marketing programs create, share and communicate value to sustain behaviour change. Traditionally, consumer value has drawn from economic theory that defined it as a function of benefit and costs as part of the supply/demand dynamic. Alternative perspectives focus on the experience of value during the consumer journey in which people actively co-create personal and social value with other actors. If we understand the exchanges of value that people are prepared to enter into, we can design better services and sustain human development outcomes. The panellists will reflect on recent work in both research and service delivery in Indonesia, Timor-Leste and Bangladesh.

**AASM Special Session: A regional social marketing association for the Asia-Pacific Region?**  
*Ross Gordon, Joy Parkinson and Nadia Zainuddin*

The Australian Association for Social Marketing (AASM) would like to start a conversation about the desirability and feasibility of establishing an Asia-Pacific Social Marketing Association - and would like your input to that conversation. To support the discussion and to prompt some productive consideration of the idea, the AASM has prepared a White Paper (copies available at the session & by email to tracey@portchester.co.nz upon request) which sets out some possible principles, and approaches, for establishing such an association. We are seeking people’s views on whether at a high level the concept of an Asia Pacific Association has value, and if so, how best to proceed. In this session, we will be engaging with people to find out if: - you see benefit in the concept of an Asia Pacific Social Marketing Association? - If so, is the approach outlined in this paper suitable? What aspects do you agree or disagree with? - How might your country or region engage with such an Association? We welcome all comments and discussion on this idea and the white paper during the session.

**Panel Session: Critical Issues in Social Change in the Asia-Pacific**  
*Ross Gordon, Nathaly Aya Pastrana, Irma Martam, Nicholas Deroose and Tom Carroll*

This special session will consider some of the issues, challenges and future reflections on social change efforts in the Asia-Pacific. Topics that will be discussed through a critical perspective include the gendered social change, the role of culture, domestic violence and female empowerment, social activism and LGBTIQ rights, and some of the social, cultural and political issues that frame social issues and social change activities in the region. Our excellent panel members are Nathaly Aya Pastrana, Irma Martam, Nicholas Deroose and Tom Carroll.
Paper Sessions: Day 1

Paper Session: Environment and Sustainability

Session Chairs:
Ross Gordon
Lynne Eagle
Australian advertising codes for posting alcohol messages on social media: What do young adults think?

Aziemah Othman & Dr Robyn Ouschan

PhD Student,
Curtin University, n.othman1@postgrad.curtin.edu.au
+61 405 570 777

Senior Lecturer in Marketing, School of Marketing
Curtin University, robyn.ouschan@curtin.edu.au
+61 8 9266 4230

Background and purpose of the study
Social media is an attractive communication platform for alcohol companies to target young people. Several studies highlight alcohol messages on social media to have a harmful impact on young people (McCreanor et al., 2013; Winpenny et al., 2012; Nicholls, 2012; Ridout et al., 2012; Moreno, Christakis, Egan, Brockman & Becker, 2012). Even though new advertising regulation codes in Australia “User Generated Content House Rules” (referred to as House Rules from here onwards) extend to user generated content, evidence is emerging that alcohol companies are resistant to taking responsibility for user postings on their Facebook pages (Donato, 2013). The self-regulatory based system relies on the public to use these rules to complain about irresponsible material posted by SNS users on the websites of alcohol companies. As social media users view and forward material on the alcohol websites or SNS, advertising regulation needs to be targeted towards them. This is a concern because social media is seen to add to the reach, speed and efficiency in spreading pro-alcohol messages to peer groups, thus normalising drinking and creating an intoxigenic environment (Griffiths & Casswell, 2010). Thus, there is a strong case to redirect alcohol advertising regulation towards user compliance and monitoring. However, to encourage

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1 Aziemah Othman is a PhD student with the School of Marketing at Curtin University. This paper forms a part of a larger study for her doctoral thesis. Her thesis topic is in the area of alcohol advertising regulations and digital marketing. She had papers accepted at the World Social Marketing Conference 2015, 2012 Asia Pacific Association for Consumer Research, ANZMAC Mid-Year Doctoral Colloquium 2014, where she won Best Poster Award. Recently in the previous International Social Marketing Conference 2016, she was awarded the Best Student Paper.
young people to monitor alcohol messages/images posted on the social media websites of alcohol brands, and to comply by not posting or forwarding irresponsible alcohol messages/images themselves, they need to be aware of and understand and embrace alcohol advertising standards. In addition to revealing young adults’ awareness of the alcohol advertising codes for social media, this study tests if their perceptions of the compliance of alcohol messages posted by the alcohol brand differs for messages posted by users. Australian alcohol advertising codes have been criticized for being inadequate and narrow in their scope, especially regarding social media advertising (The Alcohol Policy Coalition, 2011; Dobson, 2012; FARE 2013). This study investigates if these shortcomings are also perceived by young adults, the target audience of the social media messages.

**Research Method**

The Australian sample for this online survey study consists of 161 young adults (18-24 university students) reached through the Qualtric database. Young university students have been shown to be heavy social media users and engage in heavy drinking (Ridout et al., 2012; Tonks, 2012) and are therefore highly suitable for this study. The majority of the respondents (76.4%) were pursuing an undergraduate degree, and there was a fairly even spread of female (51.6%) and male (48.4%) students. All the respondents were exposed to the same four alcohol messages (two breach, two non-breach) presented as posts on the Facebook page of an Australian alcohol retailer. The alcohol messages were obtained from the Facebook page of an alcohol retailer and rated by two senior marketing academics as breaching or compliant messages by applying the Australian advertising code (ABAC). Respondents were allocated one of three different types of message sharing scenarios based on who generated and posted the alcohol message, and each group consists of an equal number of male and female. For the first group, the alcohol messages were framed as marketer generated content (MCG) i.e., as advertisements. For the second group, the same messages were framed as user generated content (UGC). For the third group, they were framed as user shared content (USC). Different codes apply to alcohol messages that have been posted on alcohol websites by alcohol companies (ABAC) and social media users (House Rules); however the wordings of the ABAC and House Rules are almost identical. Henceforth, the first group (MGC) was given the ABAC code to assess alcohol message compliance as they were generated and posted by the alcohol retailer. The second (UGC) and third groups (USC) were given the House Rules to assess message compliance as they were generated and/or posted by the user. Furthermore, individual codes were integrated into specific questions. Respondents in each group were first presented with the Code/House Rules prior to assessing the four ads/posts against the 12 articles in the Code/House Rules. Assessments of the ads/posts against the Code/House Rules were measured using an ordinal scale of: ‘definitely breaches’, ‘probably breaches’, ‘probably does not breach’ and ‘definitely does not breach’ and acceptability (presenting a mature, balanced and responsible approach to the consumption of alcohol beverages) was measured on a seven-point scale (1=Strongly Disagree, 7= Strongly Agree). In addition to assessing respondents breach perceptions, they were asked to evaluate the Code/House Rules on whether the articles are: i) comprehensive,
ii) easy to determine if an ad/post breaches the code, iii) too restrictive, iv) useful, v) ambiguous and vi) relevant, which was measured on a seven-point scale (1=Strongly Disagree, 7= Strongly Agree). To address response burden, the online questionnaires were checked for appropriate response time lengths and repetitive rating patterns.

Results

More than two-thirds (67.7%) of respondents were unaware of ABAC’s existence, and 91.3% were unaware of the ABAC Code or House Rules. This highlights awareness of ABAC regulation is low and understanding of its provision amongst this cohort is very low. One-way Analysis of Variance was conducted to examine the effect of message framing groups (MGC, UGC, USC) had on respondents’ ratings of the compliance of the alcohol ad/posts with articles of the Code/House Rules. The test showed there are no significant differences between group ratings for all 12 articles for breach ad/post 1 and ad/post 2, and non-breach ad/post 1. This suggests that by enlarge who creates and posts the alcohol message has little effect on the perceived compliance of the ad/posts. However, the test revealed there is a significant difference between the message framing groups for non-breach ad/post 2 against article 11 (must not suggest that the consumption of alcohol beverages offers any therapeutic benefit or is a necessary aid to relaxation), $F(2, 158) = 4.45, p = 0.013$. Post-hoc analysis using the Tukey HSD test indicated that MGC group ($M = 2.67, SD = 0.97$) rated non-breach ad/post 2 as more compliant to article 11 than UGC group ($M = 2.13, SD = 0.94$). In other words, the ad/post is seen to be less compliant when the alcohol message is created and posted by a user in comparison to when it is posted by the marketer.

A 4 (alcohol message type: breach ad/post 1 vs breach ad/post 2 vs non-breach ad/post 1 vs non-breach ad/post 2) x 3 (message framing: MGC, UGC, USC) within subjects repeated measures ANOVA was conducted to compare the effect of ABAC Code/House Rules exposure on respondents rating of acceptability (presenting a mature, balanced and responsible approach to alcohol consumption). The results revealed a significant effect for type of alcohol message on perceptions of acceptability, $F(3, 156) = 37.61, p < .001$, partial $\eta^2 = 0.42$ for all comparisons: The acceptability was rated lower for Breach ad/post 2 ($M = 4.88$) than breach ad/post 1 ($M = 4.38$), non-breach ad/post 2 ($M = 3.88$) and non-breach ad/post 1 ($M = 3.56$). As expected, the acceptability mean ratings are higher for the non-breach ad/posts in comparison to the two breach ad/posts. The results also revealed that there was a significant effect of message framing on the acceptability of the alcohol messages, $F(2,158) = 3.84, p = .024$, partial $\eta^2 = .046$. There is a significant difference ($p = .024$), using Bonferroni adjustment, in response to the ads/posts between UGC ($M = 4.52$) and USC ($M = 3.91$) groups, however the effect size is small (.05). These results also suggest that alcohol messages are perceived as more unacceptable when the message is created by an SNS user compared to alcohol message created by the alcohol brand advertiser.
The higher mean ratings (on a scale ranging from 1 to 7), suggest respondents generally evaluated the ABAC Code/House Rules favourably in terms of being: comprehensive (\(M=5.61, SD=0.96\)), easy to apply (\(M = 5.32, SD = 1.13\)), somewhat restrictive (\(M = 3.47, SD = 1.44\)), relevant (\(M=5.20, SD=1.08\)) and a useful guide (\(M=5.27, SD=1.11\)) for assessing ads/posts on social media. However, the sample also found the code to be somewhat ambiguous (\(M = 4.02, SD = 1.34\)). Furthermore, one-way ANOVA revealed message framing impacted on the perceived usefulness of the Code/House Rules, \((F(2, 158) = 6.55, \ p = .002)\). Post-hoc analyses using the Tukey HSD test indicated that the MGC group (\(M = 5.69, SD = 0.97\)) ratings were significantly higher compared to UGC group (\(M = 4.96, SD = 1.18\)) and USC Group (\(M = 5.15, SD = 1.07\)) ratings. This suggests the respondents found the code to more useful for assessing messages posted by the marketers in comparison to alcohol messages created or shared by SNS users.

**Conclusion**

Past studies have highlighted problems with the application of ABAC to regulate alcohol advertising on traditional media in Australia (Donovan et al., 2007; Fielder, Donovan & Ouschan, 2009). Little attention has been paid how the public interpret the alcohol advertising codes to assess breaches of alcohol messages posted on digital media such as SNS. This study reveals young adults’ lack awareness of alcohol advertising codes. This is a concern, because SNS providers (e.g., Facebook) at best only stipulate in general terms that users must adhere to the advertising regulations in their country i.e., do not present the advertising code. It is therefore it is unlikely that young people will take them into account when they are viewing and posting alcohol messages on the SNS of an alcohol brand. The articles listed under the ABAC and House Rules are almost identical. This study shows young university students found the codes easy to apply, comprehensive and relevant to the social media context. Perhaps this is a reflection of the education level of the sample (all were university students). However, in terms of usefulness, this study shows young university students found the articles to be more useful to assess the compliance of alcohol messages posted by the marketer in comparison to SNS users. The results also highlight university students evaluate alcohol messages on social media differently based on who generated/posted it (marketers versus SNS users). Research is emerging which found consumers to be more trusting of user generated content over advertising (Mackinnon, 2012). Therefore, seeing another user posting an irresponsible message could have affected or violated this trust, hence are more critical when evaluating them. In conclusion, this study suggests alcohol advertising regulation directed at SNS users should be specifically tailored to social media users otherwise they are not likely be an effective mechanism to discourage users from posting irresponsible messages.

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Familial-Energy Assemblages, energy efficiency, and making home

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² Theresa Harada PhD is a Human Geographer working as a Research Fellow with Macquarie University. Her research focuses on the intersection of climate change knowledge and household behaviours. It investigates why increasing awareness and knowledge of the impact of climate change has not significantly altered domestic household practices especially in the light of modes of personal mobility. Theresa is interested in how novel participatory and mobile methodologies can engage participants in collaborative and creative explorations of meaning and connection to place, and her work has drawn on, performative, affect-based, non-representational geographies. As such she is interested in sensory methods which pay attention to sound, touch, taste, smell and texture.

³ Gordon Waitt is a Professor and Head of Department at the Department of Geography and Sustainable Communities, University of Wollongong, Australia. Inequality is the connecting thread of Gordon Waitt’s research. To do so, he draws on a range of qualitative methods, including semi structured interviews, home-insights, sound diaries and video-methods. His current work develops this interest in inequality through three strands. Each strand addresses urgent sustainability challenges around the topics of household sustainability, fuel poverty and urban revitalisation. Key questions informing his current research include: How can low income households reduce their energy bills, and at the same time improve their quality of life? Who is doing the work of household sustainability? How can we make regional city centre more lively places?
Abstract
This paper uses assemblage thinking, and the concepts of molar and molecular lines to interpret some of the tensions families experience when negotiation domestic energy use, energy efficiency, and making home. We introduce the idea of familial-energy assemblages to consider how bodies, materials, and spaces and places are used in this context. We use an ethnographic approach drawing on narrative interviews and video methods to explore the energy use and home making practices of 13 low income families in regional NSW, Australia. We argue that assemblage thinking can help advance conceptual understanding in social marketing research regarding the multiplicities, practicalities, subjectivities, materialities, and spatialities that often make everyday life complex, messy and laden with tensions and compromises. We posit that energy research, and energy efficiency social marketing programmes need to move beyond binary arguments over the right and wrong thing to do, and acknowledge the messiness and complexity of everyday life that is reflected in programme design, and delivery.


References


Engaging with young adults about nutrition using social media

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Abstract
This paper provides an interdisciplinary viewpoint designed to inform professionals involved in nutrition-related health promotion campaigns to more effectively engage young adults using social media. Young adults are notoriously challenging to recruit into research studies and to engage in health promotion interventions. However, they are engaging well with food industry and other lifestyle “gurus” on social media, so there are lessons to be learned and translated into the public health domain. We propose that co-creation, a bottom-up approach involving young adults in creating health messages, is the most effective strategy to engage young adults in health promotion campaigns.

Social Marketing Communication RSA (Road Safety Association) to reduce road traffic accident of young driver in Indonesia

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Introduction

According to WHO, Indonesia as one of the highest population country in the world (262,068,253 million people) [http://www.worldometers.info/world-population/indonesia-population/] has the highest number of traffic accidents in Asia. Furthermore, 48% of the toll of the traffic accidents are young generations and still in their productive age. In 2016 the number of accidents was also increased by 148% from the previous year. Jean Todt, president of the Federation Internationale de l’Automobile (FIA), revealed that "road accidents are among the world's most dangerous killers and the number one killer for productive age society". In addition, the number of accidents in Indonesia is one of the highest in the world [http://rsa.or.id/utusan-khusus-pbb-jean-todt-bertemu rsa-indonesia]. The young generations are the future of a country, therefore we cannot afford to lose our future to road traffic accidents. During the development of road safety policy, the policymakers and leaders need to recognize young driver’s lack of skills as well as their lack of experience, developmental needs and exuberance for life. Road traffic crashes are not “accidents”. We need to challenge the notion that road traffic crashes are unavoidable and make room for a pro-active, preventive approach to reducing death on our roads [http://www.who.int/mediacentre/news/releases/2007/pr17/en]. One of Non Government Organization that concerned with road safety since 2009 is RSA (Road Safety Association). Road traffic injuries are a public health epidemic that costs countries millions of dollars. However, there is evidence of what can be done effectively to cut the volume of deaths and injuries linked to road traffic crashes. Bringing about a reduction in the road traffic toll among youth requires both political will and financial investments in prevention efforts targeting young people. Road safety is a vital public concern and one that affects each of us every day. We all have a social responsibility to ensure safety on our roads. The phenomenon leads to the road traffic problem such as traffic congestion increasing, traffic behavior changing from homogeneous to heterogeneous traffic, increasing of traffic accident, etc. (Abulebu et al., 2012; Zakaria et al., 2011). The authors will examine the activities that had been conducted by RSA in conducting social marketing communication as their campaign to change the behavior of young drivers to reduce road traffic accidents in Indonesia. Specifically, the following research questions frame the study: RQ: Do social marketing communication conduct by RSA (Road Safety Association) can reduce road traffic
Method
A brief description of the RSA (Road Safety Association) organizations, it is an NGO which was formed in 2006 that focus on road safety. There are several things have that has been done by RSA in spreading information about road safety. RSA also has received some awards, one of award is from Global Alliance of NGO’s Road Safety also from United Nations (From the Secretary-General's Special Envoy for Road Safety). During social marketing communication activities for road safety campaign, RSA would regularly conducts gathering around, where RSA visited various social organizations. Usually RSA members and participants hold some sharing sessions and experiences where the results are then expected to be useful for both parties. RSA also provides training materials and direct practice with purpose to find the main problem of road safety issues in Indonesia. Education on road safety has also been done by using one to many techniques campaigns on the streets with the aim of providing awareness to the drivers. If there is a government policy that is not accordance with the RSA regulations then the RSA will holds a protest in peaceful action to the government. Another thing done by the RSA is using media to socialize, such as printed media, electronic media and new media in the amplification of our education in road safety. Moreover, collaborative activities work together with similar actions. Seminars and workshops are also conducted by RSA by holding technical and academic special meetings, usually conducting a thorough study of a particular topic by solving a problem that requires interaction among participants. RSA goes to school is done by RSA, even done from the level of kindergarten with the aim of the children can remind their parents, it is known as inner circle effect. Being supportive partner doing international meeting one of them as the initiator of formation of alliance group for road safety called Global Alliance of NGO’s for Road Safety consisting of 15 countries. This research will use only one kind of tool because of the limited time and funds that is by giving education to young drivers.

Results
This research was conducted in Jakarta, with regard to the sample, there are 194 sample which have performed 2 kinds of test, and the first test is about the preparation before driving knowledge. In fact, a total of 137 people have completed pre-test and post-test activities. There are 52 people who only follow the post-test and 5 people who only do the pre-test. The participants are between 18-25 years old. At the pre-test stage, there are 15 questions, the average score of the pre-test participants was 7.52. After completing the pre-test, the samples were given some basic aspects of understanding how to drive properly and correctly. Then they have to do another test (post-test), the average score of participants after getting the debriefing / extension increased by 2 points. Thus, the average score of the post-test is 9.

Conclusion
The study investigated what activities have been carried out by the RSA as an NGO that...
responsible for road safety. The results shows that RSA has run several campaigns on road safety with various social marketing communication tools in conducting promotional activities. Researchers only focus on one activity undertaken by the RSA, that is to educate the young drivers and gave them a test to find whether young drivers become more aware of road safety after the education. The results of research shows that there is an increase of understanding about road safety after getting some education from RSA. It is proved by the score of the pre test is lower than the score of test after the education.

**Acknowledgment**

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Environmental values and eco-socially conscious consumer behaviour: does spirituality say anything?

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Introduction

Environmental issues are emerging on the global horizon as phenomena requiring immediate attention. Deforestation, infrequent rainfall leading to droughts or floods, global

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warming and rapid melting of glaciers pose a significant threat to economies as well as human welfare (De Richter, Ming, Caillol, & Liu, 2016). One of the major causes of such problems is the emissions of greenhouse gases (GhGs) which are primarily contributed by consumption of energy in the transport sector, especially the personal cars segment (IEA, 2015). Due to the huge potential in automobile sector of emerging economies such as Pakistan, emissions levels are likely to increase and pose a threat to the environment (Shah, 2015). It is thus important to promote the purchase of environment friendly personal cars and eco-social behaviors in use of personal cars, to ensure that the growth in Pakistan’s automobile industry has the least possible detrimental effect on the environment. The existing body of literature presents several models of choice of electric vehicles and ways to minimize personal car use, carried out in several different cultural contexts (Adnan, Nordin, Rahman, & Amini, 2017; Afroz, Rahman, Masud, Akhtar, & Duasa, 2015; Beck, Rose, & Greaves, 2016; Daziano & Chiew, 2012; Degirmenci & Breitner, 2017; Hahnel, Ortmann, Korcaj, & Spada, 2014), however, research on the role of spirituality in activating environmental values leading to such eco-social behaviors remains unattended. In order to provide actionable insights prior to developing strategies to encourage environmentally friendly transport choices, this study examines if and how spirituality moderates the relationship of environmental values with eco-social behaviors related to choice and use of personal cars among automobile customers across Pakistan.

The following research questions were set:

**RQ1:** Do environmental values lead to eco-socially conscious consumer behaviour (ESCCB) related to choice and use of personal cars?

**RQ2:** Does perceived consumer effectiveness (PCE) mediate the relationship of environmental values with ESCCB?

**RQ3:** Does and how spirituality moderate the mediated relationships examined in RQ2?

This study utilized an integrated model of ESCCB related to purchase and use of personal cars by conceptualizing a moderated mediation relationship of the constructs to answer RQ1 and RQ2. Altruistic, egoistic and biospheric values were taken as independent variables leading to ESCCB through PCE, which was mediator in the model. The construct of spirituality was taken as moderator in the model on the mediator – dependent variable level.

**Method**

Participants for the study were recruited randomly from selected dealerships of Honda Motors, Suzuki Motors and Toyota Motors across eight different metropolitan cities of Pakistan. The choice of metropolitan cities followed the recommendations of Greaves, Backman, and Ellison (2014), who suggested that metropolitan cities contribute more towards environmental pollution due to dense populations, hence these are principal candidates for such research studies. Data collection was carried out via surveys, with the survey instrument comprising of adopted measures from literature. The constructs of
egoistic, altruistic and biospheric values have been repeatedly reported in literature to be the primary agents for activating pro-environmental behaviors (De Groot & Steg, 2008; Ojea & Loureiro, 2007; Zhang, Zhang, Zhang, & Cheng, 2014), together with PCE, and spirituality. A 15-item inventory to measure environmental values was adopted from Snelgar (2006) and Stern, Dietz, Abel, Guagnano, and Kalof (1999). Considering that PCE is an important link between environmental values and ESCCB (Heo & Muralidharan, 2017; Jacobs et al., 2015), we utilized the 7-item PCE inventory of Ellen, Wiener, and Cobb-Walgren (1991). The spiritual oneness belief scale was adopted from Garfield, Drwecki, Moore, Kortenkamp, and Gracz (2014) consisting of 11 items while 9-items three dimensional inventory was taken from Saleem, Eagle, and Low (2018) to measure ESCCB. Responses on all measures were taken on 7-point likert scale (1 strongly disagree, 7 strongly agree).

A total of 447 responses were utilized in the final analyses. Analyses of data was conducted using SPSS v. 24.0 and AMOS v.23.0. Firstly, measurement model validation was carried out by exploratory and confirmatory factor analyses. After validation of the measurement model, structural model analyses were conducted using PROCESS macro (Hayes, 2013) in SPSS following the suggestions of Preacher et al. (2007). Both Sobel test and Bootstrap approaches were followed to test indirect and conditional indirect effects. 10,000 bootstrap re-sample and bias-corrected 95% confidence intervals were used for analyses (Preacher et al., 2007).

Results
Descriptive analyses showed that the sample consisted of highly educated respondents (82.3% graduate or above), in mid-range monthly income bracket (68% in PKR 45000-75000) and mostly in the age bracket of 19-40 years (89.2%). Structural model analyses showed that altruistic, egoistic and biospheric values were positively associated with PCE (β ranging from 0.079, p < 0.01 to 0.632 p < 0.01). On the other hand altruistic and egoistic values were negatively associated with ESCCB related to choice and use of personal cars (β =-0.115, p < 0.05 and β = -0.388, p < 0.01 respectively) while biospheric values were positively associated with ESCCB (β = 0.038, p < 0.05). The results show that individuals who act under the influence of concern for environment are likely to engage in ESCCB as compared to those who are influenced by personal gains or impact of actions on other people’s life. For second research question (RQ2) and to test the mediating effect of PCE we utilised model no. 4 using PROCESS macro (Preacher & Hayes, 2004). Results showed that PCE positively mediated all three relationships of egoistic, altruistic and biospheric values with ESCCB (Confidence intervals: 0.319 - 0.487; 0.201 - 0.319; 0.021 – 0.079 respectively). Finally, for our third research question (RQ3) we utilised model no. 14 in PROCESS macro to test conditional indirect effects (Hayes, 2013). To test the moderated mediation role of spirituality we estimated the conditional indirect effects of egoistic, altruistic and biospheric values at three levels of the moderator (spirituality): -1SD, Mean and +1SD. Results showed that spirituality moderated the all three indirect relationships (altruistic values: -1SD = 0.138, Mean = 0.158, +1SD = 0.177; egoistic values: -1SD = 0.295, Mean =0.293, +1SD =
0.292; Biospheric values = -1SD = 0.016, Mean = 0.021, +1SD = 0.025).

Conclusions
This study first investigated whether the three environmental values i.e. egoistic, altruistic and biospheric, have relationship with ESCCB and PCE and found positive associations, which confirms that even in economically stressed society of Pakistan the consumers are willing to buy alternate fuel vehicle (electric vehicle in current case) and are ready to ethical use of personal cars. These findings are consistent with many other studies in literature (Ojea & Loureiro, 2007; Schultz et al., 2005; Zhang et al., 2014) and provide promising avenue for promoting environment friendly products as well as socially responsible behaviours. Second, this study examined the mediating role of PCE. Results showed that PCE mediated the relationship of the environmental values with ESCCB which is consistent with many other studies reported in literature (Berger & Corbin, 1992; Jacobs et al., 2015; Özşahin, Kabadayı, Dursun, Alan, & Tuğer, 2015). Customers who believe that their actions or inaction can have significant effect on the environment are more likely to engage in eco-social behaviours. It is therefore imperative to build awareness of environmental impact regarding their car choice and use behaviour. Finally, findings on spirituality are core contribution of this study. Spirituality is a different construct from religiosity as it is independent of religious teachings and institutions (Garfield et al., 2014), hence, globally accepted in its meanings of oneness and interconnectedness of all elements of universe. Unlike some empirical evidence on religiosity stating that individuals with greater religious quotients are less likely to engage in pro-environmental behaviours (Bhuian, Sharma, & Rammal, 2017; Islam & Chandrasekaran, 2015), the literature findings on spirituality support the notion that higher levels of spirituality lead to greater engagement in eco-social behaviours (Afsar, Badir, & Kiani, 2016; Garfield et al., 2014). The findings of this study are also consistent with the literature. We therefore propose that ecological innovations and social behaviours can be promoted by using marketing messages regarding the need for co-existence of human race and the environment. We note that spirituality is conceptually similar across different cultural contexts, hence its applications are widespread across different countries and for a wide range of eco-social behaviours. The results of this study suggest that environmental considerations can be integrated in social marketing programs by focussing on triggering the environmental values. Furthermore, spirituality can be used in marketing communication of such programs to persuade the respondent’s involve in pro-environmental and social behaviours.


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Winds of Change: A Study of the Acceptability of Renewable Energy in Regional Australia

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Introduction and Background

Electricity is predominantly generated from fossil fuels in Australia (Djerf-Pierre et al., 2015), but concerns about climate change are driving a debate on how to bring about a transition to renewable energy (RE) (Nelson, 2016). Widespread public support is needed when developing large-scale energy infrastructures, such as wind farms (Batel & Devine-Wright, 2015), but the drivers of social acceptance have not received adequate attention (Friedl & Reichl, 2016). Renewable energy has become a top priority for the state government in Queensland (Queensland Government, n.d), but a transition away from coal-fired electricity in Australia has been hampered due to obstacles rooted in politics (Cheung & Davies, 2017; Muenstermann, 2012). High levels of localized resistance – particularly to wind power - are predicted to significantly hamper renewable energy targets set by the Australian federal, state and territory governments (Hall et al., 2015). Community opposition to siting decisions, has been somewhat dismissively classified as NIMBYISM (‘Not in My Back Yard’), and the term has been used uncritically in both policy and academic

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material (Beben, 2015; Petrova, 2016). Opposition appears to centre on four factors: dislike of their visual impact (Knopper & Ollson, 2011), turbine noise (Botelho et al., 2015; McCunney et al., 2014), potential dangers to wildlife (Marques et al., 2014) and claimed human health impacts. Government inquiries and reviews have been conducted in several countries, including Australia, and they have concluded that that there is no medical evidence of a direct link between turbine operation and human health, although the poor quality of the data has been noted (Chapman, Joshi, & Fry, 2014).

Research Objectives and Methodology
This study aims to evaluate consumers’ support for renewable energy sources, including wind farms, and examine priorities placed on factors such as human health and climate change mitigation. A quantitative methodology was chosen and a questionnaire was developed, which is the norm in renewable energy studies (Stoutenborough et al., 2015; Dockerty et al., 2012). Data was collected through field sampling and online distribution. A total of 325 usable responses were obtained. Respondents came from a regional city, Townsville, with an even spread of males and females and a variety of ages and income groups. Questions were informed by the literature (Poortinga et al., 2006; Eagle et al., 2016), noting that the various energy technologies have different environmental, economic and social impacts. 5-point Likert-type scales were used (with 1= strongly disagree and 5 = strongly agree), with one question specifically measuring support for wind energy and a second question providing benchmark data on attitudes. A rank order question was used (1= most important, 6= least important) to examine perceived priorities for generation decisions.

Results/Findings
Table 1 shows that respondents were strongly supportive of renewable energy, with wind and solar receiving the highest mean scores. Battery storage enjoyed strong support, along with hydroelectric and marine power. Nuclear energy was, by far, the least favoured technology. Responses re social, ecological and economic indicators of acceptance are shown in Table 2. Respondents agreed that Queensland’s renewable energy sources, such as wind, should be fully exploited and that Queensland was rich in renewable resources. Respondents also agreed with statements such as ‘it is our responsibility to develop renewable energy for future generations’ and ‘high levels of energy use will impact future generations’. The majority of respondents believed in human-induced climate change. Respondents disagree with the statement ‘there is no link between electricity used in the home and climate change’. Table 3 indicates that climate change is the most important factor for determining electricity generation policy, followed by cost of electricity and effects on the economy.
Table 1: Support for wind power and other energy technologies (5=strongly agree)

<table>
<thead>
<tr>
<th>Energy</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>4.70</td>
<td>0.53</td>
</tr>
<tr>
<td>Wind</td>
<td>4.62</td>
<td>0.71</td>
</tr>
<tr>
<td>Marine Power</td>
<td>4.37</td>
<td>0.87</td>
</tr>
<tr>
<td>Hydroelectric Power</td>
<td>4.27</td>
<td>0.76</td>
</tr>
<tr>
<td>Battery Storage</td>
<td>4.07</td>
<td>0.89</td>
</tr>
<tr>
<td>Biomass</td>
<td>4.01</td>
<td>0.81</td>
</tr>
<tr>
<td>Geothermal</td>
<td>3.81</td>
<td>0.99</td>
</tr>
<tr>
<td>Fuel Cell Technology</td>
<td>3.61</td>
<td>0.92</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>2.98</td>
<td>1.21</td>
</tr>
<tr>
<td>Oil</td>
<td>2.72</td>
<td>1.19</td>
</tr>
<tr>
<td>Coal</td>
<td>2.63</td>
<td>1.07</td>
</tr>
<tr>
<td>Nuclear</td>
<td>2.55</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Table 2: Attitudes towards wind energy, sustainability and climate change (5 = strongly agree)

<table>
<thead>
<tr>
<th>Attitudinal Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland’s renewable energy sources (solar, wind) should be fully exploited</td>
<td>4.33</td>
<td>0.95</td>
</tr>
<tr>
<td>Queensland is rich in renewable energy sources (e.g. solar, wind)</td>
<td>4.10</td>
<td>0.98</td>
</tr>
<tr>
<td>It is our responsibility to develop renewable energy for future generations</td>
<td>4.45</td>
<td>0.74</td>
</tr>
<tr>
<td>High levels of energy use will impact future generations’ standard of living</td>
<td>4.27</td>
<td>0.85</td>
</tr>
<tr>
<td>Human-induced climate change is occurring at some level</td>
<td>4.19</td>
<td>0.85</td>
</tr>
<tr>
<td>There is no link between electricity used in the home and climate change</td>
<td>2.43</td>
<td>1.19</td>
</tr>
<tr>
<td>Investment in renewable energy is a means of stimulating economic growth</td>
<td>3.95</td>
<td>0.92</td>
</tr>
</tbody>
</table>
Table 3: Electricity generation – priorities for policy makers

<table>
<thead>
<tr>
<th>Factor – ranked first from a list of six factors:</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping to prevent climate change</td>
<td>27.8</td>
</tr>
<tr>
<td>Cost of electricity to consumers</td>
<td>17.5</td>
</tr>
<tr>
<td>Effects on the economy</td>
<td>15.6</td>
</tr>
<tr>
<td>Effects on the natural environment</td>
<td>14.2</td>
</tr>
<tr>
<td>Effects on human health &amp; safety</td>
<td>13.2</td>
</tr>
<tr>
<td>Level of pollution</td>
<td>12.3</td>
</tr>
</tbody>
</table>

**Discussion and conclusion**

Contrary to expectations from the academic literature (for example, Marques et al., 2014; McCunney et al., 2014), we find no evidence of NIMBYISM. There is strong support for wind energy, underpinned by a belief in human-induced climate change, awareness of the social impacts of energy use for future generations and ability to exploit natural resources. Given the contradiction between public support and federal / state reluctance to support renewable energy development at the expense of coal generation, Social Marketing would appear to have a potential role to play in strengthening social acceptance and also in countering misinformation from the coal lobby (Muenstermann, 2012), potentially via inoculation strategies such as advocated by Cook et al, 2017 at downstream, midstream and upstream levels of society (Gordon; Luca et al, 2016). The role of social marketing goes beyond individual behaviour change (Saunders et al., 2015) and policy makers can help communities achieve positive social outcomes through information-based or rewards-based interventions (see Šćepanović et al., 2017).


**References**


Paper Session: Advancing theory in social marketing

Session Chairs:
Carina Roemer
Nadia Zainuddin
Food choice decisions: An empirical investigation of the Motivation, Opportunity and Ability (MOA) framework

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Introduction
Obesity is an increasing problem in Australia with prominent health and economic ramifications that call for more efficient management (Sturgiss et al., 2017). In adult populations, overweight and obesity are linked with consequential decreases in life expectancy and increases in early mortality (Peeters et al., 2003). An essential part of ideal health and wellbeing is a nutritious diet, which plays an important part in the prevention of many chronic conditions along with overweight and obesity (Carins & Rundle-Thiele, 2014). The main reason for the current overweight and obesity issue is a set of conditions that encourages excessive food intake (Veilema et al., 2017) and/or makes it easy

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to consume high caloric foods, both of which result in the consumption of more than the body requires (Velema et al., 2018).

Social marketing is one of many behaviour change tools that can be used to address the growing overweight and obesity problem (Carins & Rundle-Thiele, 2014; Fujihira et al., 2015; Kubacki et al., 2017). Social marketing has been successfully utilized to create positive change among different populations and for a variety of healthy eating goals, and to understand eating behaviour, as well as to execute action plans to improve eating behaviour (Gordon et al., 2006). Previous studies have focused on changing behaviours in a number of areas including fruit and vegetable intake (Neiger & Thackeray, 2002) and consumption of healthy choices (Hoffman et al., 2009). Many of these studies have concentrated on children, adolescents or distinct settings with only few aimed towards young adults (Carins & Rundle-Thiele, 2014; Gordon et al., 2006).

The ability of social marketing interventions to deliver behavioural change can be enhanced through use of more of the benchmark criteria (Carins & Rundle-Thiele, 2014; Xia et al., 2016). Theory is one of eight benchmark criteria outlined by the National Social Marketing Centre (National Social Marketing Centre (NSMC), 2006). Reviews of the literature indicate that theory use in social marketing is limited (Truong, 2014; Truong & Dang, 2017). Of the theories used, individual-focused theories such as the Health Belief Model and the Theory of Planned Behaviour dominate social marketing research enquiry (Luca & Suggs, 2013), and theories that acknowledge the inherent complexity of behavioural change are less evident.

Theoretical perspectives that move beyond the individual to acknowledge the social and built environment surrounding individuals have the potential to address some of this complexity, and facilitate behavioural change.

A beneficial framework, which extend research focus beyond individuals to understand social support and capacity to enact healthy eating based on the surrounding environment is the Motivation, Opportunity and Ability (MOA) framework developed by Rothschild (1999). The MOA framework has previously been applied in land management context (Binney et al., 2003). The framework considers the target audiences’ motivation, opportunity and ability to engage in the primary behaviour and proposes different action plans that social marketers should apply (Rothschild, 1999) simultaneously taking individual, social and surrounding environment into consideration. A better understanding of the MOA framework would permit social marketers to build effective behaviour change strategies (Binney et al., 2006). A review of the literature identified that reliable and valid MOA healthy eating measures are not available. Previous healthy eating studies are also broad (Hendrie et al., 2008; Parmenter & Wardle, 1999; Renner et al., 2012; Turconi et al., 2003) and given that measures have to be accurate (Rossiter, 2002) scale development is needed. Thus, this study sought to develop and empirically test an MOA measurement framework in the context of healthful eating.

References


**Introduction and Research Aim**

The variation in the application of research and evidence in the practice of social marketing is a systemic concern (Gordon et al., 2016) and one that can be no better seen than in the discipline’s use of theory. Recent reviews highlight a distinct lack of theoretically informed social marketing interventions, and even when theory is applied, it is not always clearly reported, with the purpose of using the theory or model not always stated in detail (Luca & Suggs, 2013; Truong, 2014; Truong & Dang, 2017; Pang et al., 2017). Lack of theory use is equally evident in broader behavioural change research (Davis et al., 2015). While some efforts have been directed towards encouraging theory use in social marketing; for example, Brennan et al. (2014) provide a resource describing behaviour change theories that have been applied in social marketing contexts and Russell-Bennett and Manikam (2016) offer a stage- based process for theory selection; a key omission has been a guiding framework that explicitly outlines how theory can be applied from the initial formative research phase right through to the final evaluation of a social marketing intervention. This paper...
puts forward a framework to address this gap and advance the current state-of-play.


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Exploring scepticism among young urban Indians towards ethical foods and ways to foster trust

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Curtin University of Perth

Introduction
When it comes to ethical consumption, previous studies have highlighted that a consumer’s ethical intentions may not necessarily translate into actual purchase (Auger & Devinney, 2007; Carrigan & Attalla, 2001; Devinney, Auger, & Eckhardt, 2010; Follows & Jobber, 2000). Common reasons for this include the perceived ease or difficulty of performing a particular behaviour (Ajzen, 1991; De Pelsmacker & Janssens, 2007; Follows & Jobber, 2000; Straughan & Roberts, 1999), lack of adequate resources being available to the consumer (Ajzen, 1991) and social desirability, which might positively influence ethical intentions but which may not result in actual purchase (Cialdini, 2003; Flynn & Goldsmith, 1994; Pronin, Berger, & Molouki, 2007). To date, the findings on ethical consumption relate largely to consumers in developed markets with relatively little information on emerging markets. India, which is one of the world’s most populous countries with a relatively young median age of just 27 years (Central Intelligence Agency 2012), is important market to consider. As the country undergoes rapid social and economic change, there is a young and affluent urban middle-class emerging that is adopting new consumption habits and revolutionising the traditional urban way of life (Majumdar 2010; Sinha 2011). In terms of understanding ethical consumerism in urban India, the literature on this subject is especially sparse. Previous studies have highlighted that while urban Indians might advocate buying environmentally friendly products, the

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lack of awareness and non-availability of such products are barriers to usage (Gill, 2012; Jain & Kaur, 2006) and, hence, information about the benefits of such products is first necessary in order to increase consideration (Maheswari & Malhotra, 2011). This study aimed to go deeper by exploring consumer attitudes towards ethical foods, which offered social and environmental benefits, and factors influencing these attitudes, thereby aiming to understand the perceived opportunities and challenges relating to such a concept. Hence, the main question of this research study is – *What are urban Indian attitudes like towards ethical foods and what might influence their attitudes?*

**Method**

This was a qualitative exploratory study that used focus groups as the main mode of data collection. Participants included females and males, aged 18-35 years, from the Hindu and Muslim faiths, which represent two of India’s largest religions (The Registrar General & Census Commissioner of India, 2011). Six focus groups in total were conducted in Gurgaon, located in Delhi’s National Capital Region (NCR), in August 2012. The research aimed to speak to the upper-middle segments of the middle-class, and these were recruited based on the Indian socio-economic standard of classification (SEC) (The Market Research Society of India, 2011). Given that the concept of ethical foods is new in India, the data gathering phase used the ‘grounded research’ approach. This methodology is similar to grounded theory as it consisted of systematic, yet flexible, guidelines for conducting inductive qualitative inquiry (Charmaz & Bryant, 2008) but the approach also required the interview schedule to have some functional and researcher-directed questions to which answers were required while still also preserving an interactive, respondent directed ethic (Whiteley, 2004). As participants viewed ethical foods through the lens of different cultures and value systems, there was an “emphasis on capturing and honouring multiple perspectives” (Patton 2002, p. 102). Initial discussions commenced by getting a general overview of participants’ values, beliefs, goals and meanings attributed to the term ‘ethics’, which provided some insightful context into how the term ‘ethical foods’ was subsequently perceived and defined. The research used an iterative study design, which entailed cycles of simultaneous data collection, analysis and adaptations of the data collection process to refine the emerging theory. The process of data collection was assumed to be a cyclical where, if saturation was not reached, the recruitment of additional participants and subsequently the data collection process would begin all over again. However, upon completion of six groups, it was found that saturation, within the defined parameters of the research objectives, was reached and hence there was no need for additional data collection.

**Results**

When the topic on ethical foods, and its social and environmental benefits, was brought up during the group discussions, some participants found the concept of a common good to be appealing and they welcomed this in view of the current socio-environmental challenges in India. However, there were also many doubts, questions and concerns raised towards this concept. When exploring these further, it seemed that uncertainty and scepticism towards the concept of ethical foods appeared to be largely underpinned by a sense of mistrust and disillusionment towards the system in general.
Hence, it was interesting to note how the broader social context helped shape individual attitudes. In summary, scepticism towards the concept of ethical foods appeared to arise from the daily pervasive challenges relating to food safety, hygiene and the widespread practice of food adulteration, which has resulted in consumer scepticism towards food labels in general. Furthermore, participants conveyed mistrust given the “corrupt” practices of government regulators along with a sense of being “manipulated” by food companies and stated that, when food shopping and eating out in general, what one sees may not necessarily represent what really is. Hence, it seems that ethical food claims that proposed to consider and enhance the well-being of others were met with a similar sense of scepticism. Moving forward, the key ways to address consumer mistrust would be to highlight the “healthy” benefits of such foods, thereby also emphasizing their authenticity, quality and safety, market these foods through “trusted” brands and channels, and associate these foods with local cultures and traditions to foster a sense of familiarity and trust.

Conclusions
As highlighted in previous studies, increasing awareness and knowledge about the benefits of green products is important in order to encourage consumer consideration (Maheswari and Malhotra 2011). While this study indicated the same, it also highlighted the need to address consumer uncertainty, doubts and scepticism about the authenticity, safety and quality of such foods. Hence, highlighting the “healthy” benefits of ethical foods is important to alleviate these concerns. In addition, it is essential for such foods to also reflect the local “traditions” in an unfamiliar and rapidly changing urban landscape. To this point, Choo, Chung, & Pysarchik (2004) have also highlighted that when it comes to new and unfamiliar foods, collective cultural norms have a strong influence on Indian consumer attitudes and purchase behaviour. Furthermore, on a broader scale, the findings also highlight that it is insufficient to focus on consumer attitudes (the bottom up approach) but there is also a need to incorporate a top down approach which would mean including governments, food regulators and the food industry in a strategic and inter-connected way to truly improve ethical consumption practices. To this point, French & Gordon (2015) also highlight looking beyond consumption practices in isolation to also include broader social and environmental influences. This would also mean going beyond the 4Ps in marketing practice, which are a short term evaluation of marketing effects, to also considering citizen engagement, empowerment, advocacy, lobbying and policy change. In a country with numerous socio-economic challenges, these are a few initial steps in a potentially long and arduous journey to encourage sustainable consumption in India.


References


Introduction

According to Thornicroft, (2013), people living with mental illness die on average 20 years earlier than the general population due to preventable physical health conditions. For every one person with a mental illness that dies due to suicide, ten die early due to cardiovascular disease, respiratory disease and cancer (Roberts, 2017). In Australia, this issue is seen as unjust and a major public health concern that has led to the prioritization of improved physical health of people with a mental illness across all states and territories (National Mental Health Commission, 2016). To date, the implementation of health and wellbeing strategies have typically utilized a top-down
management structure, where decision making is centralised (Hastings, 2009; Hoek & Jones, 2011). The implications of this type of structure mean that decision making is underpinned by poor problem identification, short-term focus, and a failure to conduct sufficient consultation with end users (Donovan, 2011; French & Gordon, 2015; Burmeister & Marks, 2016). Furthermore, such approaches overlook key contextual, social, and cultural factors (French & Gordon, 2015; Hastings, 2012). Together, these factors can lead to ill-informed implementation strategies (French & Gordon, 2015; Gordon, 2011; Hoek & Jones, 2011), often disempowering and isolating consumers from the decision making, especially for those consumers located in rural and regional communities (Sayers et al., 2017).

The aim of this study is to demonstrate how a consumer-centric implementation model can be improved through a social marketing program aimed at empowering consumers. Arnstein’s (1969) ladder of citizen participation, and O’Flynn’s (2008) collaboration continuum framework are used to frame and identify key factors that lead to citizen control and a workable means of transformation. The model is strengthened by the use of critical reflexivity to ensure alignment of carer and consumer identified issues with social marketing actions.

**Conceptual Model/Proposal**

Gordon (2012) and French and Gordon (2015) have recommended placing the consumer at the centre of strategic development in order to leverage co-creation, consumer engagement and strategic holistic thinking. In order to transform from tokenism, Arnstein’s (1969) model argues that simply informing, consulting or placation of a consumer in the development and implementation process should be replaced with a true citizen focus, characterized by partnership, delegation and citizen control. Such inclusive practice is now widely adopted in mental health disciplines (Bernoth et al., 2016, Sayers et al., 2017).

This paper uses O’Flynn’s (2008) conceptualization of a collaboration continuum to frame the transformation towards citizen controlled initiatives. The authors define collaboration as the willingness of the parties to enhance one another’s capacity – helping the other to ‘be the best they can be’ for mutual benefit and common purpose. In collaboration, the parties share risks, responsibilities and rewards, they invest substantial time, have high levels of trust, and share common turf (O’Flynn 2008). At the core of O’Flynn’s model are three concepts (1) Governance, which includes collaboration, coordination, cooperation; role clarity and accountability; sharing and managing of information; risk management, monitoring and evaluation; (2) Capacity, which includes system capacity; leadership; commitment, resources, relationships, trust, team training, guidance; and (3) Management of Information, which includes communication; consultation; engagement by drawing together, sharing and managing information.

Critical reflexivity has been argued to encourage the deep and meaningful consideration of social marketing strategies through the practice of critically reflecting on the potential impact of underlying assumptions, values and implications of the strategy on the intended audiences (Gurrieri et al., 2013.). This practice ensures that specific voices are not being marginalised or silenced and helps social marketers incorporate consumer perspectives (Gurrieri et al., 2013).
**Case Study**

In response to calls for increased citizen participation (through co-creation), more collaborative and holistic approaches to the design and implementation of health and wellbeing strategies are now being recognized (National Mental Health Commission, 2012). In accordance with O’Flynn, (2008) at a governance level Equally Well is a distinctive national collaboration; it is not run by government, but uses a collective impact approach incorporating professional groups, non-government organisations, peak bodies and those who have a lived experience of mental illness. At a capacity level, Equally Well has drawn on those who have shown demonstrated leadership in mental and physical health, demonstrated a commitment to advocacy and who have resources that are beneficial for the collective.

Furthermore, the committee has entrusted those who have made an impact in the field to provide guidance and support. At a management of information level, the committee, has been established to coordinate, develop and share trusted physical health resources. These resources are also shared with consumer and carer representative to determine appropriateness. Through co-creation, if existing resources do not meet the standard required by end-users, consumers and carer groups will collaborate with the implementation committee to create more user friendly and comprehensible resources. The main benefit of the committee is the optimisation of collaborative behaviour and limitation of duplicates, this is done by using audit tools and stakeholder collaboration in the form of collaborate database, that catalogues key physical health resources. Equally Well facilitates the sharing of best practice, through a digital channels, with design and underlying guiding principles were direct by consumers.

Importantly, consistent with Arnstein’s (1969) model, Equally Well has several channels of consumer participation. These include consumers’ and carers representation on the committee, and consumer forums, where consumer recommend resources for use, critically reflect on current resources and critically assess gaps in resources. This process provides a foundation for transparency, and critical accountability, ensuring the true voice of consumers is represented in everything from channel and content strategies, to the establishment of guiding principles for digital communication. Further, the practice of critical reflection has ensured marginalisation and generalisation is avoided and have ensured a true alignment between the committee’s purpose and outcomes.

**Implications for theory and practice**

Broadly, the co-creation and collaboration process yielded improved consensus between committee members and those destined to be impacted with the implementation of Equally Well. This section will discuss three implications related to social marketing practice, which include improved channel strategy, resource comprehension and content strategies. Improved channel strategy/tactics: Due to poor access to the internet, committee representatives identified the need to use trust touchpoints in the community. Consumer and carer representatives identified the need to use local libraries and post offices as information intermediaries. This channel strategy was essential for people in lower socio-economic areas, new migrants and individuals where English is a
second language. For those with internet access, the manner in which resources are presented was an issue. Marketers are often encouraged to use clips and other bandwidth rich content (Heinze et al. 2016), however representatives on the committee expressed the need for low bandwidth options, as they had previously experienced issues disseminating material that required high bandwidth access. The process resulted in two consumer and carer led website tactics (i) resources available in downloaded PDFs form (ii) in-screen PDF reader, for those who did not have a computer with a PDF reader.

Improved resources comprehension for end-users: The committee through a national audit of resources identified hundreds of different resources relating to various dimensions of physical health targeted at those living with a mental health condition. Importantly however, the consumers and carer representatives argued that current top-down structures often result in highly formal and jargonistic documents, creating barriers of communication. This was evidenced in the audit and acknowledged by committee members. The recommendation to rework complex and dense documents into user friendly material was adopted. To help secure the success of this initiative, the consumers and carer representative group volunteered to guide the implementation committee through this process to ensure resources are user friendly and utilized visuals to aid comprehension.

Improved content strategy: In addition to assisting with improved accessibility of resources, the co-created digital marketing report identified consumer content as an influential strategy to change physical health practices. Consumer and carers offered to develop case study material, highlighting the effectiveness of Equally Well approved health practices and strategies. Such approaches shift content creation away from a controlled central channel, which is often considered a risk to brand reputation (Heinze et al. 2016).

In conclusion, this study has demonstrated a contribution to social marketing consumer centric theory. By re-conceptualising collaboration and viewing it as a continuum, rather than a set of static rules, the progression away from tokenism has commenced. The consumer-centric implementation model demonstrates how consumer-controlled approaches, can truly empower those directly at the centre of the issue, avoiding the pit-falls of a highly centralised and governmental approach. Further, by employing critical reflexivity, an honest and transparent review of marketing practice can occur, better representing the true voice of consumers and providing resources for those impacted by the comorbidity of poor physical and mental health.


References


Evaluating the effectiveness of a brief versus a comprehensive alcohol social marketing program

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Abstract
School-based alcohol education programs typically inform adolescent populations about alcohol consumption in didactic and unengaging formats. Social Marketing programs offer a more engaging and fun format that may change the way that adolescents think about alcohol more effectively. Brief program deliveries have shown encouraging effects when used to address adolescent drinking but to date have not been utilised in alcohol social marketing programs. The current study compares the effectiveness of a comprehensive program with a brief program. Specifically, preliminary pilot data of a brief social marketing program (n=211) was compared to outcome changes in the comprehensive version of an alcohol social marketing program (n=1257) that was targeted at adolescents. Results show that the brief program delivered promising preliminary findings similar to those of the established comprehensive program. Subsequently, there is potential to provide a shorter and less resource intensive delivery mode while yielding similar outcome effects from further program deliveries. Future research is warranted to arrive at a more generalisable conclusion.

Introduction/Background
Adolescent populations, particularly in nations such as Australia, have been identified as particularly at risk to the harms of binge drinking (Department of Health, 2015). Alcohol education programs have traditionally been implemented within-school contexts in order to facilitate the transfer of knowledge of harms and strategies to cope and make responsible decisions regarding alcohol (Lee, Cameron, Battams, & Roche, 2016; Rundle-Thiele et al., 2015). Although studies demonstrate positive effects, school-based approaches also face a number of challenges resulting in alcohol education programs being one-way, didactic in nature and facilitated by ill experienced teachers rather than trained facilitators (Lee et al., 2016). Such programs lack engagement (Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2003), emphasise knowledge transfer (Lee et al., 2016; Onrust, Otten, Lammers, & Smit, 2016) and ultimately hinder effectiveness of programs (Shernoff, Ruzek, & Sinha, 2017).
Recent school-based efforts have attempted to overcome these challenges through fun and engagement. The comprehensive Blurred Minds alcohol social marketing program is an example of this and is built on the theory of gamified learning (Landers, 2014) and social cognitive theory (Bandura, 1989) and features a range of games and activities as well as discussions led by experienced facilitators. In an attempt to streamline and more efficiently deliver this comprehensive program, a brief version of the Blurred Minds program was developed. Brief interventions have shown promising effects when used to address binge drinking (Terlecki, Buckner, Larimer, & Copeland, 2015), and offer a low dose, cost effective option for intervention and prevention studies (Hennessy & Tanner-Smith, 2015). Using an Australian high school context, the present study aims to determine if change outcomes from the comprehensive programs can still be achieved using a brief (shorter and less resource intensive) delivery mode.

**Method**

This study ran concurrently with the process and outcome evaluation for the 2015-2018 cluster randomised controlled trial of Blurred Minds. Specifically, this study adopts a pre-post online questionnaire design in order to compare outcome effects with previously collected data of the larger randomised controlled trial (Dietrich et al., 2018). Interim findings from the delivery of the brief program in two schools (n=211) have been collected at the time of writing. These pilot study findings contrast the fourteen school results from the larger randomised controlled trial, delivered to catholic schools in Queensland.

The Theory of Planned Behaviour (Ajzen, 1991) was used as guiding evaluation framework and featured the same constructs as the larger trial. Specifically, constructs of attitudes, behavioural intentions, social norms and self-efficacy that had previously demonstrated high reliability and validity were applied (Norman & Conner, 2006; Rivis & Sheeran, 2013; Rundle-Thiele et al., 2015). Paired sample t-tests determined changes between pre-and post- questionnaires.

**Results/Findings**

The average age of the sample, was 15.41 years-old, with 49% being male participants. Of these participants, only 15% indicated that they had never tried alcohol, and 25% indicated drinking five or more standard drinks in a typical drinking instance. Reliability tested with Cronbach’s Alpha for each construct exceeded the recommended threshold of 0.7 for all constructs (Neuman, 2013).

Table 1 provides a comparison of pre and post data for both the comprehensive and brief program. While the comprehensive program demonstrated significant changes in attitudes towards excessive drinking for the better, the brief version was not able to demonstrate any change. The brief program demonstrated significant changes in social norms from pre (M=2.5, SD=1.0) to post (M=2.3, SD=1.0) t(78) = 2.084, p < 0.05 while the comprehensive program did not demonstrate significant changes. Both programs maintained behavioural intentions with neither reporting a significant difference after program participation. A significant reduction (undesired change) of self-efficacy was observed for the comprehensive program from pre (M=4.7, SD=1.3) to post (M=4.5, SD=1.6) program t(317) = 2.285, p < 0.05 while the brief program did not show significant differences between pre (M=5.1, SD=1.1) and post (M 4.9, SD=1.4).
Discussion

This study aimed to compare the outcome effects of comprehensive and brief versions of an alcohol social marketing program. While the comprehensive alcohol social marketing program significantly changed attitudes for the better, the brief version was not able to demonstrate this effect. It is, however, important to note that the participant sample in the brief program had significantly more negative attitudes towards excessive drinking at baseline when compared to the sample of the comprehensive program. Attitudes in the brief program even remained at a more negative score post program when compared to the comprehensive program. The brief program was able to show a positive significant change on social norms characterised by less favourable views towards normative drinking perceptions. This was not achieved in the comprehensive program. Social norms serve as competing forces or barriers to abstaining from drinking (Kirby, van der Sluijs, & Inchley, 2008) and the effects of the brief program are therefore encouraging.

Concerningly, the comprehensive program reduced self-efficacy of students which is an undesired effect. Although not significant, the brief program showed a similar negative shift in participant’s self-efficacy. These shifts may be the result of participants having overestimated their own abilities to refuse alcohol offerings in social settings when facing peer pressure (Ding, Newman, Buhs, & Shell, 2018).

In summary, the brief program demonstrates promising preliminary findings and may have the potential to provide a shorter and less resource intensive delivery mode than the comprehensive alternative, while yielding similar outcomes. The findings are preliminary and must be viewed with consideration of certain limitations, which provide avenues for future research and the drawing of more generalisable conclusions. For example, the two schools were sourced from a convenience sample and featured a distinctly lower sample size than the comprehensive program. Finally, the current study could be improved upon by running a variation of different brief programs, assessing their effectiveness, and comparing them each to the comprehensive program.


Reference List


Declare or dispose: New Zealand’s Border Compliance Social Marketing Programme

Phill Sherring

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Project/Issue Overview
The Ministry for Primary Industries (MPI) developed the Border Compliance Social Marketing programme with the aim to “reduce risk to New Zealand posed by travellers bringing in and failing to declare or dispose of biosecurity risk items.” The programme aims to protect New Zealand’s horticultural and agricultural industries, as well as its environment by ensuring overseas visitors don’t bring in items that may contain harmful pests and diseases.

Background and Social Context
New Zealand has strict biosecurity (also known as quarantine) laws to prevent the entry of foreign insects that could ruin our horticultural exports, and diseases that could threaten our native and unique flora and fauna. One entry point is through international air passengers. New Zealand welcomed 3.7 million visitors in 2017 (Stats NZ, 2018). Beginning in 2008, the programme is one of a range of interventions to achieve passengers’ compliance with biosecurity laws (others include enforcement activity).

Behavioural/Social Change Goals
The main goal of the programme is to change the behaviour of travellers to achieve higher voluntary compliance and leave potential biosecurity risk items at home. Otherwise declare them to border staff, or dispose of in special amnesty bins at the airport on arrival. A secondary goal is to have local communities advocate on MPI’s behalf to friends and families overseas that may be soon visiting New Zealand.

MPI measures higher voluntary compliance by assessing both detection and seizure rates of undeclared items and results of an annual compliance survey (spot checks on passengers

¹ Phill Sherring is an experienced marketer, with a career spanning 20 years across private and government sectors. The Ministry for Primary Industries is the government agency tasked with protecting New Zealand from biosecurity threats to the country’s horticulture and agriculture industries, and environment. Phill manages programmes influencing the behaviour of international visitors to not bring items that could carry biosecurity risk, and mobilizing New Zealanders to look out for pests and diseases in their communities. Phill has delivered award winning campaigns in both banking and government sectors, and has a Bachelor of Business Information, specialising in Marketing and Communication Management.
conducted after they have completed biosecurity screening).

**Citizen orientation**
The intervention approaches have been developed in partnership with MPI’s service design team. This involved customer mapping the passenger journey, and utilising touch points to communicate with the passenger and influence their behaviour.

**Research and Insight**
The programme is underpinned by qualitative research of passengers conducted by an independent research company every two years. This is carried out by face to face interviews with recent visitors to New Zealand at Auckland Airport. In addition, we survey local respondents (to measure advocacy behaviours) via an online survey. It establishes and maps awareness and attitudes before departure for New Zealand, and how our interventions then impact on behaviours. This research takes place every two years.

Key findings from our latest research noted that:

- Perception of biosecurity risk is at an all-time high, however a large proportion of passengers don’t perceive a risk in bringing in small items for personal use.

- The main barriers to complying were lack of knowledge about our laws, not knowing items such as specialty foods were available in New Zealand, a desire to bring food to New Zealand for loved ones, and lack of information in their native language. More passengers are considering high risk items when packing their bags and when on their journey to New Zealand.

**Segmentation**
We segment the programme primarily towards international air travellers whose attitudes and behaviours most need to change, and this is determined by the highest identified risk. This is heavily influenced by our operational data that is recorded when any undeclared items are confiscated from passengers, observations and experiences from our frontline staff, and research into visitors awareness of and behaviour towards biosecurity.

Currently, passengers arriving on flights from China and India pose the highest risk due to the number of passengers arriving, the risk items they carry, their limited knowledge of biosecurity, and current non-compliance rates. To use New Zealand and Australian passengers as a baseline, Chinese are 4 times higher to be found with undeclared items, while Indian passengers are almost 6 times higher.

In addition to targeting passport holders offshore, a secondary audience of local ethnic communities is targeted. Due to the cultural reliance on word of mouth as a trusted source of information, advocacy remains an important channel for encouraging behaviour change.
Value
Agriculture and horticulture are two of New Zealand’s biggest contributors to the New Zealand economy. For example the horticulture is worth $5.6b annually. (Horticulture New Zealand, 2017). By bringing about behaviour change with passengers – this programme maximises its value to New Zealand by lowering the risk of disease and unwanted pests to our important industries. Biosecurity also helps protect our environment and natural flora and fauna, a key attraction to overseas visitors and contributes to our $12.9b tourism industry (Tourism New Zealand, 2016).

Competition
All through the travel process there are other organisations seeking the attention of the passenger, from travel agents, inflight entertainment on flights, and then ‘noise’ at the airport such as duty free shopping. We’ve combatted this by trying to place our interventions in these environments, so our audience sees our messaging as important complimentary information to consider and pay attention to. For example digital advertising on travel sites, signage at departure airports, and information on the flight through documents and inflight videos.

Competition is also found in the desire of visitors wanting to bring food from home to friends and family living in New Zealand. This desire can be stronger than wanting to comply with our laws or the lack of perceived risk these items pose. In our education we point out that New Zealand has Asian supermarkets that stock food items from China, India and other countries from the Asian continent.

Theory
The programme is influenced by the Theory of Planned Behaviour (Azjen, 1991). We work to influence attitudes towards biosecurity and its importance, introduce interventions to give the passenger control (for example translated guides to declaration forms), and use advocacy from friends and family to create social norms. This is all done to strengthen the intention to leave items at home or declare upon arrival, and therefore carrying out our desired behaviour.

The programme is also influenced by the planning process developed by the National Social Marketing Centre (NSMC) in the United Kingdom (Hopwood & Merrit, 2011). Their approach of scope, develop, implement, evaluate and feedback is still used in the programme now. The programme also fits within the VADE (Voluntary, Assisted, Directed, Enforced) compliance model developed by a former New Zealand government agency The Ministry of Fisheries, based on theory from Dr Edward Maibach. (Department of Internal Affairs, 2011; Maibach & Parrot, 1995).

Over time, we have borrowed from other approaches such as Community Based Social Marketing (McKenzie-Mohr, 2011) with a focus on understanding barriers and targeting interventions in local communities.

Social Marketing Intervention Mix
Our interventions are in three stages – pre-travel, in-journey and arrival. During pre-travel we focus heavily on promotion, place and education. We promote the concept of biosecurity through digital
advertising (on online travel booking sites) and search engine marketing. We also utilise a strong relationship with New Zealand’s Immigration service to provide information when issuing entry visas (education) and promotion within their visa collection centres (place). Education at this stage is essential, and we assist this with having translated websites and resources. An example is our Chinese language biosecurity website www.nzquarantine.com. This site had over 250,000 visitors in 2017.

Our research indicates that passengers want to know why they cannot bring items with them. So at this stage we have moved our messages from simply the desired behaviour “declare when arriving” to explaining that items can damage our industries and environment (which is also a key concern for our audiences). This has improved understanding, awareness of key items not to pack, and consideration at this stage.

Services and place feature predominantly during the in-journey phase. We partner with airlines to provide translated guides to completing the passenger arrival card (which is compulsory for all visitors). We see this as a service as it helps passengers understand the legal declaration form they are signing, and assist them to comply with the rules. We also screen on all flights, an in-flight video detailing biosecurity and asking the passenger to follow the rules.

Upon arrival we rely heavily on a mix of infrastructure, place and promotion. Airport signage and bins, loud speaker announcements, assistants to help (including translators), and aids for our staff are all carefully considered to deliver successful interventions.

Messaging in-flight and upon arrival change from explaining the “why”, to a more compliance message of “declare items to our staff, or dispose in amnesty bins”. These are accompanied by stating the penalty for non-compliance ($400 fine). Obeying the law and avoiding the fine are still regarded by our segments as the key motivator upon arrival.

Advocacy is a key tool of the marketing mix also, with ‘word of mouth’ from friends and family living in New Zealand a highly effective tool to reaching overseas travellers before visiting. A “tell your friends and family so they avoid a fine” message is relayed here.

**Evaluation and results**

We have seen a reduction in the number of passengers in our target audiences being caught with undeclared risk items. This is calculated with frontline operational data. The number of undeclared items seized from Chinese passengers from 2009 to 2017 has reduced 67 percent. The rate for Indian passengers has similarly halved in this time.

Qualitative research also points to significant results achieved in changes in behaviour. We saw statistically significant increases in passengers considering biosecurity and items when packing bags (Chinese passengers from 75 percent in 2015 to 90 percent in 2017, and Indian 63 percent to 92 percent); and in the related behaviour of not actually packing items (Chinese passengers 61 percent in 2015 up to 78 percent in 2017, and 55 percent to 73 percent for Indian passengers). 96 percent of passengers (across both key segments) declared items upon arrival for checking as a
precautionary measure. In our local audiences segment, 42 percent of those surveyed had advised family and friends about biosecurity before travel commenced.

**Lessons Learned**

The key lesson learned was the importance of knowing your customers and the barriers that they face. For example an inflight video we developed attempted to use humour to get our messages across. Unfortunately the humour was lost in cross-cultural differences with certain audiences, confusing our messages.

Building strong partnerships are also a strong factor in success. Our most effective interventions come through partnerships, especially where our partners allow us to use them as a channel to deliver messages to their customers. This has ensured our channel mix is targeted, varied, and cost effective.


**References**


Behaviour or behavioural change?

Patricia David, Professor Sharyn Rundle-Thiele

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Background

Behaviour change is key to solving major societal issues (Michie et al., 2010), particularly in the contexts of health, injury prevention, environmental protection, community involvement and finance (Lee & Kotler, 2011). Each year, substantial amounts of public funds are invested in preventative health and environmental protection efforts. Australia spends over $3 billion on preventative health per annum, equating to over $100 per capita (OECD, 2017), while environmental expenditure was estimated in 2016/2017 at $980 million (Morton, 2017). Despite sustained and substantial investment over time, preventable health and environmental issues persist as major problems. Of further concern, many of these problems are getting worse. For example, if we do not change current practice, obesity prevalence rates and costs will continue to increase through to 2025 (PWC, 2015). If no further action is taken to curb the growth in obesity, forecasts indicate $87.7 billion in additional direct and indirect costs will be accumulated across the

¹ Patricia David a Ph.D. candidate and Research Fellow at Social Marketing @ Griffith. Her research interests are motivated by understanding what drives behavioural change. Patricia was awarded a Griffith University Postgraduate Research Scholarship to undertake her Ph.D. study, which focusses on the development of a Theory of Behaviour Change. She has assisted in research projects within Social Marketing @ Griffith using both quantitative and qualitative approaches, and worked as the project manager and research fellow in social marketing projects. Patricia has previously worked in marketing management positions in the industry and her current work focusses on the design and implementation of social marketing programs in a broad range of social issues.

² Professor Sharyn Rundle-Thiele is Director, Social Marketing @ Griffith and Editor-in-Chief, Journal of Social Marketing. Drawing on her commercial marketing background Sharyn’s research focuses on applying marketing tools and techniques to change behaviour for the better. She is currently working on projects delivering changes to the environment, people’s health and for the greater social good. Selected current projects include changing adolescent attitudes towards drinking alcohol (see www.blurredminds.com.au/students), increasing healthy eating and physical activity to combat obesity, reducing food waste and delivering change in wide variety of settings. Research partners in 2018 include Defence Science and Technology Organisation, Australian Defence Force, Queensland Catholic Education Commission, Redland City Council, and more. Sharyn’s research is published in more than 120 books, book chapters and journal papers.
next decade in Australia (PWC, 2015).

Behaviour change is complex, and a review of behavioural change literature shows that theoretical and analytical approaches may be confusing behavioural change with behaviour. Changing behaviour is a dynamic process, where ongoing changes both internally and externally can lead to growth, regression, or stagnation. Research focused on explaining or predicting phenomena at a single point in time is not able to capture these dynamic effects. An example is the study undertaken by Gardner et al. (2012), where despite having repeatedly measured all items across two time points (T1 and T2), static behaviour (behaviour in T2) was utilised as the dependent variable with static measures as independent variables (past behaviour, intention, attitudes, subjective norms, PBC, self-identity and habit) ignoring the potential for a dynamic approach, which captures behavioural change to be taken.

Some scholars have introduced a distinction between models of behaviour and theories of change (Dolan et al., 2012; van der Linden, 2013). According to these authors static models of behaviour are more diagnostic and they are geared towards understanding the psychological factors that explain or predict a specific behaviour. In contrast to static behavioural explanations, theories of change are more process-oriented and these are generally aimed at understanding how to change a given behaviour. The aim of this paper is to distinguish between the concepts of static and dynamic behaviour and to propose a theoretical shift in the field of social marketing.

Behaviour or Behavioural Change?
To understand the difference between behaviour and behavioural change, one must be able to distinguish between static and dynamic. Static refers to units of observation, each of which are collected at unique time points (for example, behaviour), while dynamic is attributed to individual units of observation measured repeatedly over time using the exact same measures (behavioural change) (Ployhart & Vandenberg, 2010). Explaining static behaviour is not the same as explaining dynamic behaviour, as static variables cannot explain individual change over time (Ployhart & Vandenberg, 2010). At best, static measures aggregate a group of individuals examining collective differences at two or more time points. Hence, most behavioural focussed theories and outcome evaluations explain or predict behaviour at a single point in time, therefore describing a static behavioural act or action, and the determinants of behaviour at that time point.

Static views limit research designs to insights into the drivers of behaviour (Pitariu & Ployhart, 2010). Since behaviour and behaviour change are unique concepts, we can expect that the determinants of behaviour at one point in time may not be associated with behavioural change. While the ultimate measure of success of most interventions is improved behaviour (e.g. increased physical activity, reduced food waste, reduced smoking), this is usually dictated by the occurrence of behaviour change. Therefore, it is critical to also measure the mechanisms of change, behaviour change, symptom improvement (e.g. weight change, blood pressure change), and behaviour maintenance components to determine the effectiveness of interventions to deliver change.
The need for dynamic approaches: Implications for Theory

Literature shows that most social marketing programs do not apply theory, despite calls for more theory use in the discipline (Truong & Dang, 2017). Even in the cases where theory is applied, literature shows lack of clarity in how theory was used (Truong & Dang, 2017). In order to achieve successful interventions, it is essential that the right theory is applied. Most commonly used theories in social marketing are behavioural theories. It is common practice in the field to use such theories to explain or predict behavioural change. One clear example is the second most used theory in the field, the Theory of Planned Behaviour (TPB). The TPB is often carelessly used as a behavioural change theory, despite the theory’s authors having stated that it is not a behavioural change theory (Ajzen, 2015).

According to Belk (2017) marketing research has narrowed in thinking and our research has become impoverished as a result. Given the end goal of social marketing is behaviour change and there are fundamental differences between behaviour and behaviour change, theories focussed on behaviour change, utilising methods capable of modelling dynamic processes are needed. Research employing longitudinal design and analytical methods that are focussed on understanding the transition between behavioural states is urgently needed in social marketing. By changing focus in social marketing, insight into the determinants of change can be uncovered and more informed interventions can be developed.

Implications for Research and Practice

While disciplines are centered on understanding what drives change (Michie et al., 2008; Ployhart & Vandenb
g, 2010) many methodological and theoretical perspectives are not behaviour change centered. Longitudinal methods permitting individual change to be observed are requisite to understanding behavioural change and the drivers of change. Studies should focus attention on identifying determinants of behavioural change before accepting the static theoretical perspectives that dominate behavioural change research practice. Research efforts that is focused on understanding behaviour change determinants is needed to inform strategic decision making delivering more effective behaviour change programs.


References


Is perception reality in consumer dominant value creation?

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Background
The initiation and maintenance of positive social behaviours offers significant transformative wellbeing implications for citizens in society. Social change research has demonstrated the efficacy of value creation in allowing us to encourage, support, and facilitate the performance of positive social behaviours amongst citizens (see Chell & Mortimer, 2014; Leo & Zainuddin, 2017; Zainuddin et al., 2017). However, two important gaps remain in the current body of knowledge.

First, there is a lack of empirical examination for how value creation can be used to encourage behaviour initiation in social marketing, as much of the existing work has focused on behaviour maintenance. The processes of change model identifies initiation (i.e. recruitment and action) and maintenance (retention) as separate and distinct stages (Prochaska & DiClemente, 1983), each presenting different sets of challenges and considerations for social change. Second, much of the existing empirical research on value creation in social marketing has viewed value co-creation as dyadic (i.e. service provider-consumer) relationships. Anker et al. (2015) suggest a greater focus on Consumer Dominant (CD) value creation research is needed (consumer-consumer), as existing value creation ideologies (i.e. product dominant and service dominant) cannot adequately explain this. Social marketing scholars have provided tentative support for Anker et al.’s view, recognising research on the role of the individual can offer more rounded understanding of value creation in social change, adopting a consumer dominant approach in their value research (see Gordon et al.,

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² Rory Mulcahy is a Lecturer of Marketing at the University of the Sunshine Coast, Australia. His research interests include gamification, serious games and other forms of technology to assist consumer wellbeing. Rory’s research has appeared in Psychology and Marketing, Journal of Services Marketing, Journal of Service Theory and Practice and Journal of Social Marketing.
2018; Zainuddin et al., 2016). However, despite the initial support offered by this emerging work, further research is needed to fully capture the role of consumers in value creation where little interaction with social marketing service providers takes place and how this varies at different stages of consumers’ readiness for social change.

Drawing from CD logic and value creation, the current study’s aims is to examine the differences between the imagined value creation process and outcomes for self-service non-users, relevant to issues of behaviour initiation, with the realised value creation process and outcomes of self-service users, relevant to issues of behaviour maintenance. This led to the study research question – RQ: What are the differences between the expectations and the reality of value creation processes and outcomes in CD social marketing services? A self-service context was selected to operationalise this research and address the research question, as self-services have limited service provider-consumer interaction, which is reflective of CD. Bowel screening self-service is the context used in this study for two reasons. First, health self-care management offers significant transformational wellbeing outcomes to individuals and is therefore an important area of investigation in social marketing. Second, the selection of bowel screening self-service is consistent with the health care literature which increasingly recognizes that health care does not only occur with a server provider present, nor at a health care facility, and can begin or take place in the home (Danaher & Gallan, 2016).

**Method and Analysis**

A dual cross-sectional quantitative survey was hosted online using Qualtrics, enabling data collection from users and non-users of bowel screening self-service. Men and women aged 50 years and above had never been diagnosed with bowel cancer were sampled, as this represented the primary target population of the bowel screening population health screening program in Australia (Bowel Cancer Australia, 2015). Prior to relationship testing, the constructs used subjected to reliability and validity testing and model fit was assessed. Both models indicated reasonably good fit. Average variance extracted (AVE) scores were also calculated and discriminant validity was assessed. Multi-group analyses using invariance testing were performed using AMOS 24.0 to establish statistically significant differences between users and non-users.
Results

<table>
<thead>
<tr>
<th>Relationship</th>
<th>$\chi^2$</th>
<th>Users $\beta$</th>
<th>Non-Users $\beta$</th>
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<tbody>
<tr>
<td>Stress Tolerance $\cap$ Hedonic Value</td>
<td>1.00 (ns)</td>
<td>.017</td>
<td>.07*</td>
</tr>
<tr>
<td>Motivational Direction $\cap$ Hedonic Value</td>
<td>5.01*</td>
<td>.01</td>
<td>.33***</td>
</tr>
<tr>
<td>Motivational Direction $\cap$ Utilitarian Value</td>
<td>7.11**</td>
<td>.08</td>
<td>.43***</td>
</tr>
<tr>
<td>Co-Production $\cap$ Hedonic Value</td>
<td>6.69**</td>
<td>21***</td>
<td>-0.03 (ns)</td>
</tr>
<tr>
<td>Co-Production $\cap$ Utilitarian Value</td>
<td>2.27 (ns)</td>
<td>.22***</td>
<td>0.06 (ns)</td>
</tr>
<tr>
<td>Consumer Readiness $\cap$ Hedonic Value</td>
<td>0.30 (ns)</td>
<td>.61***</td>
<td>.72***</td>
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<tr>
<td>Consumer Readiness $\cap$ Utilitarian Value</td>
<td>3.33(ns)</td>
<td>.66***</td>
<td>.45***</td>
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<tr>
<td>Hedonic Value $\cap$ Satisfaction</td>
<td>28.10***</td>
<td>.28***</td>
<td>.92***</td>
</tr>
<tr>
<td>Utilitarian Value $\cap$ Satisfaction</td>
<td>34.36***</td>
<td>.73***</td>
<td>.07 (ns)</td>
</tr>
<tr>
<td>Satisfaction $\cap$ Behavioural intentions</td>
<td>1.46 (ns)</td>
<td>.90***</td>
<td>.87***</td>
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$R^2$

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<tbody>
<tr>
<td>Hedonic Value</td>
<td>.63</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>Utilitarian Value</td>
<td>.82</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.91</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>Behavioural Intentions</td>
<td>.81</td>
<td>.77</td>
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</tr>
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***p<.000, **p<.01, *p<.05, ns non-significant

The results suggest that the value creation processes are different between the two groups, but the outcomes are similar, in that perceived or expected satisfaction is a strong driver of behavioural intentions to repeat the behaviour. In terms of consumer contributions, those who have engaged in health care self-service before (i.e. users) appear to focus on the “doing”, while those who have no experience (i.e. non-users) appear to focus on the “preparing”. Motivational direction, which refers to having a clear understanding of one’s role in a consumption process (Kelley, 1992), is a more influential consumer contribution on value for non-users than for users. Perhaps, having an accurate and adequate understanding of the expectations of the role that one is required to play in a consumption situation can serve as reassurance to those who lack experience and familiarity with the process. This also explains why hedonic value is a more influential value dimension on the expected satisfaction for non-users, which is consistent with Parkinson et al. (2018). In contrast, having some experience and familiarity with the process allows an individual to focus on becoming...
more proficient at the self-service. This explains the greater influence of co-production and consumer readiness on value for users, as these consumer contributions tend to focus on more utilitarian, rather than hedonic aspects (Bendapudi & Leone, 2003). This also explains why utilitarian value is more influential on satisfaction for users.

Discussion and Conclusion
The findings offer a theoretical contribution by examining consumers’ experience of CD value creation at behaviour initiation and behaviour maintenance stages. The theoretical and empirical insight of CD is an important emerging perspective for social marketing as it posits consumers as capable of being able to create value for themselves with little to no interaction from organisations. Thus, this research demonstrates the growing role consumers can take in their own healthcare and how this can be encouraged at behaviour initiation or behaviour maintenance stages. Practically, this study contributes by highlighting the need for different strategies when recruiting (behaviour initiation) versus retaining (behaviour maintenance) health self-service users, or encouraging behaviour initiation versus facilitating behaviour maintenance. This is particularly relevant in population health, which has a tendency to use population-level, rather than segmented approaches in their strategy.


References


**Appendix**

![Diagram](image-url)
Paper Session: Individual Group Community and/or Organisational Wellbeing

Session Chairs:

Amy Wilson
Carolyn Loton
Red Flag Gambling Behaviours: A Public Health Campaign

Tennele Shields and Nicola Coalter

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Project/Issue Overview
While social marketing can be a powerful tool to modify behaviours, there are risks associated with poor design and implementation. There’s some evidence that social marketing which sits within a value base incorporating four principles: product; price; place and promotion can be used in health promotion. There is a growing body of evidence that shows shame and stigma is pervasive and persistent in problem gambling. It is an aspiration within a broader strategic direction to work to further develop practice evidence in social marketing.

Carter and colleagues (2011) sparked curiosity leading to further exploration of ethical issues in marketing and promotion. There was a gap in our knowledge and becoming aware of that inspired inquiry. The outcome of this work was a robust and reliable evaluation framework to examine the ethical dimensions of social marketing images and messaging produced (Amity Community Services Inc., 2017)

Background and social context
Amity Community Services Inc. (Amity) is a non-government, non-denominational, not-for-profit agency that has been providing prevention and intervention services to the Darwin and broader Northern Territory community in relation to behaviours of habit since 1976. Amity aspires to be a leading community based organisation and values and actively promotes the adoption of healthier habits and lifestyles. Amity provides a range of professional services and projects that foster and support healthier habits and lifestyles.

To date, there are difficulties of setting up experimental designs for social marketing interventions

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1 Tennele Shields is a project officer at Amity Community Services Inc. and undertakes a range of activities relating to health promotion, community education and information and harm minimisation.
in areas such as gambling where behaviour can be harmful. This highlighted a gap and need to clearly articulate values that can be gained from robust evaluations and to identify elements of programs that need to be evaluated. Red Flags campaign was the case study to test Amity’s *Ethical Framework for Health Promotion* (Amity, 2017). The remainder of this paper explores in greater detail the aim, development, dissemination, evaluation and outcomes of this campaign.

**Behavioural/Social Change Goals**

Often problem gambling campaigns focus on individualising problem behaviour. Hing & colleagues (2015) in their gambling research on shame and stigma, found people who experience negative stereotypes and had blame placed upon them have a fear and reluctance to disclose the problems experienced.

Red Flags: A Public Health Campaign was designed and implemented to raise awareness of behaviours related to problems with gambling and as a strategy to highlight behaviour change to minimise harms of excessive gambling. Thomas and colleagues (2014) identified specific behaviours such as borrowing money, gambling for extended periods of time, loss of control during gambling, and gambling on multiple activities. The campaign aimed to demonstrate behaviours and calls to action for behaviour change while engaging humour and a Territory landscape and iconic figure – Croc!

Given the diversity of the Territory, our population comprises of 25.5% Aboriginal Australian (Australia Bureau of Statistics, 2016) and over 100 languages spoken originating from different nationalities, we were cognisant of language diversity throughout the Northern Territory and therefore purposely worked to ensure the stories we told reflected this knowledge. The stories were focus group tested with diverse stakeholders and the campaign aimed to reach regional and remote areas of the Northern Territory. The campaign was disseminated through various media platforms. Outcome measures of the campaign included the design and implementation evaluation along with capturing anecdotal evidence of impact of change for people.

**Citizen orientation**

The Northern Territory’s population is spread over 1.3 million square km and our total population is estimated at 244,300 people. This is 1% of the total population of Australia. It is important for Amity to undertake public health campaigns that are evidence and ethically based. Similarly to the Dumb Ways to Die campaign about train safety (Quelch, 2014) humor and animations were used as a way to portray serious messages to create an impact.

**Research and Insight**

Thomas & colleagues (2014) research into in-venue problem gambling indicators provided evidence from which to draw. In 2012 Metro Trains in Melbourne partnered with McCann Australia to promote train safety. The campaign promoted employed engaging characters with animation and humour to raise awareness of risky behaviours and promote behaviour change.
Segmentation
The Northern Territory is diverse among its people and land. The diversities meant there was a conscious decision to remove words from the animation, allowing the behaviours to be the focus. We aimed to reduce individualising harms from gambling.

The local Northern Territory newspaper is noted for its iconic front headlines, often featuring crocodiles. Crocodiles are an iconic feature of the Territory and this was the rationale for ‘Croc’ in the Red Flags campaign. Using humorous characters to show behaviours around gambling was to create distance between behaviours and attributes of people.

Value
Baum (2008) argues the importance of public health on populations rather than on individuals means if we change a risk factor even by a small change it can have an increased effect on the public health problem within a community. Our public health campaign sought to highlight behaviours relating to gambling through storytelling and by doing this we aimed to break down barriers for help seeking.

Competition
The gambling industry is reported to have spent $234.5million dollars on advertising in Australia in 2016, an increase from $89.7million in 2011 (Victorian Responsible Gambling Foundation, 2016).

Theory
Core constructs of the Trans theoretical model; the stages of change and self-efficacy was used to guide development of the messaging. The model rests on the theory that people move through different stages when altering behaviour. The campaign was designed to increase consumer’s belief to make change.

Social Marketing Intervention Mix
The red flag gambling behaviours were broadly promoted within the community through TV marketing, online marketing (YouTube), and direct marketing via poster and USB drop. Calls were promoted to increase consumer’s belief to make change as well as advocating for greater awareness of harms around gambling.

Partnerships
italk library is a social-entrepreneurial company making resources and public education campaigns. italk library’s central experience has been working with people in both urban and remote communities for the last twenty years.

Evaluation and results
External evaluation on the process, found the animations avoided stigma associated with pathologising problem gambling. By focusing on behaviours and integrating humour the campaign remained morally and ethically neutral on the causal basis of these behaviours. The five animations were found to have considerable entertainment value, they were interesting and engaging and could be viewed as a series of scenes which encouraged continuity. The narrative structure that
depicted actions of characters in time instead of simple one-off, ‘poster style’ messaging assisted the audience with extracting and interpreting the red flag behaviour (Morrison Associates Pty Ltd, 2017).

Positive feedback was about use of the short animations to raise awareness around gambling behaviours and encourage conversations with people. Other positive feedback was received from young people in the community who had seen the clips on TV.

**Lessons Learned**

We learned when using change-based intervention specifically during the development and design of social marketing campaigns, it’s important to view the design, implementation, evaluation and call-to-action steps through the stages of change lens. Further, reducing shame and stigma for people in our community is key for social change.


**References**


indicators-2014.pdf

Cultural Differences in Students’ Perceived Barriers to Low-Risk Drinking: A Comparison between New Zealand and Vietnam

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Introduction

Heavy episodic drinking amongst university students is a significant public health concern (Reavley et al., 2011). Transitioning students from heavy to moderate drinking patterns offers one potential avenue for targeting at-risk drinking. Unfortunately, moderate drinking is deemed uncommon or even unacceptable (Conroy & de Visser, 2014) within the university culture of intoxication. It is important to understand inhibitors of moderate drinking behaviour amongst student populations. Previous research examining influences of student drinking behaviour has resulted in varying findings between different countries. This variation can be attributed to the fact that culture influences alcohol use and misuse (Castro et al., 2014). The majority of cross-cultural studies in the field have focused on specific internal influencers such as beliefs (e.g., Oei & Jardim, 2007), motivations (e.g., Mackinnon et al., 2017), and social factors, particularly social norms (e.g., Monk & Heim, 2014). The polarisation of research in the area has left a gap for researchers to take a holistic

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approach to examining cross-cultural differences in students’ drinking. The ecological framework in behavioural sciences and public health has been increasingly proposed and applied in social marketing research (Brennan et al., 2016). It relies on two premises: (1) the influences of specific health behaviours occur at multiple levels; and (2) there are interactions between the individual and environmental factors (McLeroy et al., 1988). The framework has the advantage of explaining individual antecedents while taking social and other environments into account (Sallis et al., 2008). Hence, this study aims to explore how students’ perceptions of barriers to moderate drinking behaviour vary between a binge drinking country and a moderate drinking country from an ecological perspective. Such a comparison arguably provides important public policy and social marketing implications to change drinking behaviour in cultures of excessive consumption (Hogan et al., 2014). Statistics reveal that New Zealand (NZ) students drink in a heavy and harmful way (Connor et al., 2013) as opposed to students in Vietnam (VN) (Diep et al., 2016). Thus, NZ and VN are appropriate contexts for this study.

**Method**

Participants were asked to complete an open-ended, pen-and-paper questionnaire collecting: demographics, personal alcohol consumption using the AUDIT-C (Bush et al., 1998), and a vignette designed to ascertain student’s thoughts on the barriers to practicing in low-risk drinking in a third-person perspective. The questionnaire was the same for both samples but in their native language. Participants included university student drinkers, 226 from NZ and 277 from VN. In NZ, participants were recruited by third year university students. In VN, data was collected by the first author in students’ classrooms. Demographic data revealed NZ students were slightly younger than VN students: M_Age,NZ = 20.36 (SD = 1.26) vs. M_Age,VN =20.78 (SD = 1.23). There were slightly more male participants in the VN sample (51.1%) than the NZ sample (44.2%). Using the gender-specific AUDIT-C cut-off points suggested by Barry et al. (2015), 89.4% of NZ students and 19.4% of VN students were identified as hazardous drinkers. Inductive qualitative content analyses (Elo & Kyngäs, 2008) were employed separately for each country. As a result, 25 themes emerged from the data. Dummy variables were created for each theme. Only themes whose relative frequencies (i.e., percentage of participants mentioning them) exceeded 5% within one or other country were examined. Based on the ecological framework, these themes were grouped into three main categories, namely Intrapersonal barriers (including: Positive attitude towards drinking, Low self-control, Habit, Low negative expectancy, Low intention, Addiction, Feelings, and Boredom), Interpersonal barriers (including: Peer pressure, Social pressure, Peer norm, Social norm, Fear of missing out - FOMO, and Identity), and Environmental barriers (including: Personal circumstances, Socialising activities, Personal events, Public events, Drinking culture, Living environment, and Working environment). Chi-square analyses were conducted to examine whether there were significant differences in the salience of themes mentioned by students in the two countries.

**Results**

Findings showed that there were statistically significant differences in the conceptualisation of barriers to moderate drinking between NZ and VN students (see Appendix). Compared to students in VN, NZ students were significantly more likely to mention: positive attitude, low negative...
expectancy, low intention, boredom, peer norm, social norm, FOMO, drinking culture and living environment (p < 0.01). In contrast, NZ students were significantly less likely than VN students to mention: low self-control, feelings, addiction, habit, personal circumstances, public events, and working environment (p < 0.01, except for habit with p < 0.05). Peer pressure, social pressure, identity, socialising activities and personal events were not significantly different in the participants’ responses in the two countries (p > 0.05).

Discussion and conclusion
Findings revealed that students perceived a plethora of barriers to moderate drinking at three levels (intrapersonal, interpersonal and environmental factors), consolidating the ecological approach that stresses the importance of taking a broad view to understanding alcohol consumption practices (Brennan et al., 2016). Regarding cultural differences in multi-level influencers, the current study provides unique insights into VN and NZ students’ perceptions of drinking behaviour. In general, NZ students conceptualised the barriers to moderate drinking as more general and broad factors (e.g., FOMO, Drinking culture and Living environment), while VN students perceived the barriers in a more specific and personal manner (e.g., Feelings, Habit, Addiction, Personal circumstances and Working environment). It is likely that the normalisation of heavy drinking in NZ has resulted in students in NZ being more concerned about social and environmental influences on the failure to moderate drinking than are students in VN. Alternatively, when being viewed as a normalised practice, heavy drinking may not be considered as a personal problem by NZ students. This resonates with findings from a UK study which argued that “calls to individual responsibility in drinking are unlikely to succeed in the [western] marketing environment” (Szmigin et al., 2011, p. 759); yet they can be possible in eastern and moderate drinking cultures such as VN. Hence, within heavy drinking student cultures, such as NZ, personal responsibility is minimized, and as such interventions should be focused at the group and environment rather than individual level.

The findings also signify precautions in transferring insights gained from research in western cultures to drinking behaviour in other contexts. A few similarities in students’ perceptions of the barriers (i.e., similar importance of Peer/Social pressure, Identity, Socialising activities and Personal events) were revealed. This is likely a result of some universal developmental changes in the transition from adolescence to adulthood, which involves identity exploration, negotiation and interpersonal relationships establishment (Schulenberg & Maggs, 2002).

Understanding why students do not practice moderate drinking at multiple levels of influences results in more effective interventions (Wymer, 2011). It is noteworthy that these interventions need to be adapted to the cultural context as our study confirms significant cultural differences in students’ perceptions with regard to drinking moderation. Thus the study helps to guide the future planning of country-specific multi-level interventions, at least in the cases of NZ and VN, based on understandings of unique influencers in each country.

For instance, preventive intervention for NZ should focus on changing drinking culture, lifestyle, living and social environments and attitude toward heavy drinking, while enhancing self-control,
regulating emotions, and managing habits and personal situations should be targeted in VN. Coping with peer pressure should be given the highest priority across the countries, as well as managing self-image and socialising activities.


References


‘Make It Count’ 2018

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¹ Dr Kathy Knox, Ph.D., is a research psychologist with expertise in human development, attitude and health behaviour change across a range of settings. Kathy is a member of the Menzies Health Institute Queensland and Research Fellow with Social Marketing @ Griffith leading a rapidly developing program of empirical research on social behaviour change. Kathy’s research focus is on communities and sustainability behaviours including health education and communication, reducing food waste and excess water use, increasing recycling and organ donation. Kathy has direct experience in designing and conducting community-based interventions and has evaluated local and national interventions to change awareness, knowledge and cultures of behaviour.

² Dr. Ali Ahani, MBA, PhD., has recently finished his Ph.D. in Business Informatics and has published in peer-reviewed scientific journals such as Scientific Reports–Nature and Health Informatics. Ali’s background in marketing and information systems provides him an effective vision for social marketing and health informatics research. Ali has provided research assistance on the Developing the DonateLife App since DonateLife Week 2016. Ali is an experienced research assistant with Social Marketing @ Griffith research center and has assisted in collecting and analyzing quantitative data, promoting organ donation in the community, and addressing barriers to organ donation discussion in culturally and linguistically diverse groups.

³ Dr Joy Parkinson, Ph.D.’s program of research focuses on social marketing, behaviour change and social media marketing to encourage behaviour change. Digital and online behaviour change programs that Joy has been involved in the design and development of, for example, Mumbubconnect, have seen significant uptake and positive behaviour change outcomes including breastfeeding and weight loss. Joy has expertise in consumer audience segmentation for a range of behaviours including physical activity and disaster preparedness. Joy is experienced with conducting research and programs with a variety of target audiences including vulnerable populations such as obese and CALD populations in Australia.
**Project overview**

This project aimed to raise awareness and increase Australian Organ Donor registrations at the 2018 Brisbane Ekka in Brisbane, Queensland, Australia. We conducted targeted awareness and registration activities, concurrent with The Ekka, featuring a unique smart device application named the ‘DonateLife App’, to increase Australians’ awareness of donation and directly facilitate online donor registrations.

**Background and social context**

In 2017, 1,063 Australians received a life-changing organ or tissue transplant from 381 posthumous organ donors and their families (OTA, 2017). Despite growth in national donation rates, in September 2017 there were 1,340 Australians on organ transplant waiting lists (OTA, 2017). Organ shortage presents a substantial economic and social burden for those who need an organ, their family, community, and the national healthcare system. To boost donation rates requires that donation is encouraged as an optimistic social value, and requires normative changes to make family discussion about organ and tissue donation an accepted and valued experience. Lack of awareness is a critical factor in behaviors of registration and family discussion about donation (Hyde & White, 2013). Previous research indicates the general public has insufficient knowledge about organ donation and this lack of awareness is an obstacle to developing those target behaviors.

Public education campaigns and large scale community events can improve donor recruitment (Feeley & Moon, 2009; Rady & Verheijde, 2016; Tumin et al., 2014) as they can provide opportunities for transferring thoughts among locals and visitors and help as an educational and teaching platform (Dwyer, Mellor, Mistilis, & Mules, 2000). Evidence shows that short-term interventions that i) address commonly held concerns about organ donation and ii) provide an immediate registration opportunity, boost efficiency of community-based interventions (Golding & Cropley, 2017). Therefore, large scale community events such as the Ekka 2018 provide a unique opportunity to increase organ donation awareness and registrations among target demographic groups. The Ekka was the setting for ‘Make It Count’, a community campaign featuring the DonateLife App, designed to improve organ donation awareness and registration behavior. The Ekka is an annual event drawing crowds of 400,000 across five days.

**Social Marketing Criteria and Make It Count Behavioral Change Goals**

Specific behavioral goals for ‘Make It Count’ were established based on national baseline data for organ and tissue registrations and strategic national goals (Donatelife, 2017) for increasing registration among target demographic groups:

1) Increase awareness of organ donation among young adults through social media engagement during Ekka

2) Distribute flyers and marketing materials widely to the community during Ekka

3) Increase number of registrations on AODR during Ekka
To facilitate registrations and prompt opportunities to discover, decide and discuss facts about organ donation, the DonateLife App was developed by Social Marketing @ Griffith with funding from the Australian Government Organ and Tissue Authority. By digitally monitoring registrations, App downloads, and tracking of social media metrics, the campaign is able to evaluate progress towards targets.

**Customer Orientation and Insight**

Development of the ‘Make It Count’ campaign draws on evidence from a systematic review of previous studies (Knox et al., 2017) to understand target audience sentiments, and a program of qualitative (focus group) and quantitative (survey) formative research with target audience member [paper in preparation] which yielded the following actionable insights:

- Despite positive public sentiment towards organ donation, perceived lack of opportunity and low levels of awareness prevent supportive attitudes being converted to consent behavior;
- Simple prompts, nudges, and reminders are sufficient to initiate discussion and decisions about donation.

In response, the Make It Count campaign was designed to be customer oriented and to provide opportunities to register, or to find out more about organ donation at the Ekka. In particular, the DonateLife app design was informed by pilot exploratory research and a series of focus groups with the target audience. Content generated by the intended end user was integrated into App functionality. Team members were trained to provide verbal and written information and provided a physical point of contact to ‘Make it Count’ i.e., iPads to facilitate actual online registrations.

**Exchange and Competition**

The ‘Make it Count’ campaign sought to diffuse commonly held misconceptions and myths surrounding organ donation, overcoming acknowledged barriers to engaging with the topic to minimize costs and maximize the benefits by creating convenient opportunities to:

- **Discover**: Teams of trained campaigners were present at venues and transport hubs during The Ekka with flyers, merchandise and ipads to facilitate behaviour *in vivo*;
- **Decide**: Present facts and dispel myths via content delivered in multiple modalities (in person, in print media, via animations and images presented in the DonateLife App);
- **Discuss**: Formative research showed that discussing donation doesn’t have to be serious, dark, or difficult.

By providing a prompt (i.e., talking points generated by peers), an opportunity, and a reminder or nudge (via scheduling through the App), the ‘Make It Count’ campaign addressed competition and exchange.

**Segmentation**

Given the global significance of organ shortage, and the whole-of-community engagement focus of the Ekka, this campaign addressed the identified need to increase registrations by targeting activities to underrepresented audience segments: young adults, males, and culturally and linguistically diverse communities, in the following ways:
• The DonateLife App presented content in six languages (simplified Chinese, Punjabi, Hindi, Arabic, Vietnamese, and English),

• Team members from diverse cultural backgrounds and fluent in languages other than English conducted campaign activities at the Ekka,

Marketing mix
The ‘Make It Count’ community campaign utilized multiple methods to enable behavior change, including awareness raising promotion to increase knowledge and visibility of the issue, and practical hands-on support *in vivo*. Design elements of the campaign took into account previous findings concerning common barriers [paper in preparation] and obstacles to achieving the target behaviors. The campaign is innovative in that the content presented is entirely customized to suit the individual user, and has a theoretical base grounded in previous health behavior research (Arriola, Robinson, Thompson, & Perryman, 2010; Guadagnoli et al., 1999; Quinn et al., 2006).

In keeping with the segmentation strategy, the content within the DonateLife App is tailored to individual stages of change (i.e., readiness to decide or discuss), acknowledging that audience segments at different points along a continuum from pre-contemplation to action require tailored information, strategies of engagement and have diverse needs. App users designate a preferred language. A staging algorithm classifies individuals according to ‘stage of readiness’ (pre-contemplation to action) (Prochaska & DiClemente, 1982) for deciding and communicating their organ donation intentions. The content presented and a users’ subsequent interaction within the DonateLife App is tailored, including content relevant to their individual cultural beliefs, religion, age, and gender. The DonateLife App engages guides the user through discovery of facts, providing multimedia resources and links to video clips, animation and multicultural and faith resources. The DonateLife App supplies prompts (push notifications) to discuss with family, and supports individuals to overcome barriers and set a goal to initiate a discussion.

Theory
Where social marketing interventions are theoretically based, the Theory of Planned Behavior (Ajzen, 1991) dominates, despite a known gap between intentions and behavior (Judith, Philip, & Malcolm, 2011). The ‘Make It Count’ campaign draws on Trans-theoretical Model (Prochaska & DiClemente, 1982), traditional economic exchange theory, the Elaboration- Likelihood model of communication and persuasion (Petty & Cacioppo, 1986) and context- specific organ donation constructs (Schulz, Meier, Clausen, Kuhlencordt, & Rogiers, 2000).

Partnerships
This project is sponsored by the Organ and Tissue Authority and managed by Social Marketing @ Griffith, Griffith University. The project team are members of the Menzies Health Institute Queensland, Social Marketing @ Griffith research center within Griffith Business School, Department of Marketing, Griffith University.
Evaluation and Results
At the time of submission, evaluation results are not yet available.

To demonstrate that the project has achieved these targets, the specific measures are:

- Tracking (via electronic tally) the number of registrations collected during Ekka
- Metrics to measure social media engagement and reach during Ekka
- Number of AODR flyers and other marketing materials distributed during Ekka. If accepted for IMC2018, current results and progress to targets will be presented.


References


Broadening Cultural Horizon in Social Marketing: Upaya meningkatkan kesadaran laki-laki untuk melakukan konseling (Male engagement through increased awareness for men’s counselling) – A Case Study of Pulih Foundation.

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Project/Issue Overview
Pulih Foundation’s long-line of involvement in assisting victims of gender based violence supports the need for a gender transformation approach2 to help reduce violence against women and children. This approach needs to use socio-ecological framework where violent prevention efforts must be conducted at the individual, family, community and country level. To make this happen, we are involved in the MenCare + (2013-2015) program and continues with the Prevention+ (2016 - 2020) program, as well as making our own independent efforts through various media. This paper focuses specifically on the efforts undertaken in creating campaigns aimed specifically at the prevention of violence against women in urban areas, focusing on awareness raising in help seeking

1 Nirmala Ika Kusumaningrum and Irma S. Martam are clinical psychologist graduated from University of Indonesia and has been working on gender based violence, state based violence, domestic violence, crisis & risk management, conflict resolution, gender inequality, and family crisis issues since 2003. Both has long engagement with Pulih Foundation – a not for profit organization working for trauma recovery and psychosocial intervention. The authors would like to thank Pulih colleagues IGAA Jackie Viemilawati, Jane L. Pietra & Danika Nurkalista for discussions and their extensive contribution collaborated within this paper.

2 Definition of gender for this paper refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviors of both women and men (femininity and masculinity). Gender roles and expectations are learned. They can change over time and they vary within and between cultures. Systems of social differentiation, such as political status, class, ethnicity, physical and mental disability, age and more, modify gender roles (UNESCO, 2003). Gender Transformative Approaches are program or interventions that create opportunity for individuals to actively challenge gender norms, promote positions of social and political influence of women in communities and address power inequities between persons of different genders and it is going beyond just including women as participants http://www.healthcommcapacity.org/wp-content/uploads/2014/08/Gender-Transformative-Approaches-An-HC3-Research-Primer.pdf)
behaviour in men. One of the outcomes expected from the program is there will be increased awareness, change of attitude and behaviour of men towards this issue – to include men to prevent violence against women. The main purpose of this case study is to gain awareness of help seeking behaviour in men by having psychological counselling. The indicator is the increase of male who do counselling in Pulih Foundation (Pulih Foundation Men Care Report, 2015).

**Background and social context**

Violence rate against women and children in Indonesia is still high. The results of Komnas Perempuan’s CATAHU data in 2017 shows 348,446 cases which 70-80% of them occurred in the private sphere (Catatan Tahunan, 2018). One of the causes of this violence is the existence of a patriarchal hegemony and a deeply rooted social norm that views men as dominant figures and has powers beyond women and children who are given subordinate roles. It is communicated and passed along generation through education and nurture process and even becomes part of the existing rules and policies.

Essentially, men also experience the burden under the masculine and dominant role given to him. However, due to lack of knowledge, experience, and skills to manage situation, men tend to use violence as their catalyst for the anger and frustration. Yet when further explored, in fact men are not comfortable with it. They themselves need to be understood and need help to be able to manage themselves well so as to foster better relationships with spouses or people around him.

Pulih Foundation, with a background in psychosocial services, understands how the process of internalizing cultural values is transmitted through education or family value to the individual. Sometimes the experience leaves a personal trauma and requires a recovery process. However, counselling to psychologists is not common practice in Indonesia, especially in men. Seeking help tends to be seen as a sign of weakness and men are not allowed to show it. Therefore, introducing this new ‘help seeking behaviour’ amongst men will be a challenge based on the norms and culture they grew up with.

**Behavioural/Social Change Goals**

Since 2002, Pulih has counselled victims of gender-based violence, especially victims of violence against women and children in the domestic sphere. In doing this, Pulih uses a psychosocial approach, in which the client is seen not only as an individual but also as part of his social circle. Based on the experience it is found that men (couples) also need to be included in the prevention of violence against women and children because men and women should share gender education in order to understand each other, many men also disagree with violence and dominating roles attached to it, men also have issues related to the gender constructs attached to them, and the development of society today also requires a more open view of both men and women in terms of the gender constructs they have implanted.

With that in mind, Pulih welcomes the WPF Rutgers offer to work with other partners in Indonesia to participate in the MenCare+ program in 2013 - 2015 and then continue with the Prevention+ program from 2016 to present. Both programs aim to involve men to reduce violence against
women and children through various approaches. The MenCare+ program is a program implemented in Brazil, South Africa, Rwanda, and Indonesia (Jakarta, Lampung, Yogyakarta and East Java) and the Prevention+ Program as a continuation of MenCare+ is implemented in Pakistan, Rwanda, Uganda, MENA and Indonesia (Lampung and Yogyakarta).

MenCare+ and Prevention+ attempt to generate gender transformation, with socio-ecological approach, where men are seen as part of society and social system so that approach is done at individual, family, community and culture and country level. Socio ecological perspective encompasses context in the broadest sense of the world, to include physical, social, cultural, and historical aspects of context (including trends at the local and global level such as globalisation, urbanisation, and large scale environmental change) as well as attributes and behaviours of persons within (McMichael AJ 2002). And, this approach is in accordance with the psychosocial approach that has been done by Pulih Foundation. This multi-level approach in Prevention + program (individual, community, institutional and government) become crucial, complementing all the work and advocacy of feminist groups in order to transform the intersecting social and structural factors that allows Gender Based Violence (GBV) to persist. And another component of the program is engaging young and adult men to be part of the solution, become partners/ advocates for changes together with young and adult women to challenge and transform harmful gender norms and practices.

Basically, it is the combination of different approach in different level, campaigning at individual level. In this case through fatherhood campaign promoting behaviour change of father to be and new father on child rearing behaviour. Up Stream Marketing conducted by doing advocacy of certain policy such as a mandatory of father attendant on anti-natal care in community health centre. The Change Agent such as midwives, primary health care, teacher and religious leader also need to be involved and persuaded that their role is important to influence the father and father to be to change their behaviour towards child rearing.

For Prevention + program, Pulih Foundation has developed the strategy through health and education sectors, with activities that mobilise communities through strengthening the capacity of individuals (such as counselling) and institutions (training and workshops), public education for empowerment (women) and awareness (men) in a form of seminars, lectures and discussion forums, as well as media campaigns promoting the values of cooperation, healthy relations, gender equality, nonviolent nurturing, and the value of positive masculinity.

Together with our partners we develop Male Counselling program that is in line with local conditions based on the module that was developed by Rutgers Netherlands. This counselling program was originally an attempt to make behavioural changes in men who committed domestic violence, but later in their use, developed into counselling for men in general in order to prevent further and recurrent violence.

We conducted counselling for perpetrators of violence, especially in the context of intimate relationships as voluntary and mandatory interventions to prevent recurrent violence in intimate
and family relationships, especially in spouses and children, to complement other interventions and prevention. When MenCare+ and Prevention+ program initiated, there was no baseline for Jakarta, considering the absence of a special assisted group intervened in Jakarta. However, based on the work experience of Pulih and our partners we recognise that men are less accessible to counselling services and the specific services for men also limited. In addition, the two programs are a medium to achieve the objective of preventing violence against women and children, while the objectives of this paper and case study is to show the connection of increasing number of men who access counselling services due to the campaign, using the number of male clients who accessed the previous Pulih’s service as the baseline.

In order to increase awareness of the availability of counselling for men, Pulih Foundation has made several awareness raising activities. The aimed is to increase awareness among female and especially male about violence against women and how counselling or seeking help able to develop positive behaviour toward women and children. The activities include:

1) Partnering with several universities and high schools to conduct educational awareness and empowerment activities.
2) Training Psychologists and Counsellors for more capacity in men’s counselling.
3) Recruiting and training young male facilitators to become agents of change in their environment as well as the wider environment.
4) Conducting campaigns and public education utilising social media.
5) Working with print and online magazines which shares concerned on the same issues.
6) Incorporate the idea of male inclusion and implement it on practical campaign such as resource person on field or for media activities.
7) Creating a discussion forum of father recruited by utilising social media.
8) Training health and police personnel in an effort to lead mandatory counselling for men perpetrator.
9) Developing mobile application related to healthy and gender equal parenting.

By providing information through various media, it is hoped that awareness will arise that discussing personal issues and seeking help is not a shame but it will be useful to help their psychological health and their relationships with people around.

As a result, by 2014, the number of male clients in Pulih Foundation reached 27 people. By 2015 reached 49 males, by 2016 reached 49 males and in 2017 increases to 103 males. From these activities, there is expectation for minimum increase of 20% per year for male clients.

Although the number is still very small considering the scale of the problem and number of violence victims. However, this increased has shown that increased of awareness is not only become a passive knowledge but some of them do act on in, seeking for help which consider a big leap considering the social and cultural context they grew up with, where men is supposed to be strong and tough.

This effort is actually facing some challenges:

1) Criticism from women activists that the program is actually providing another privilege for men
2) Challenge in changing the social norms and also religious teaching which still very strong in promoting patriarchy culture, where men is perceived as having leadership role (with all the attributes attached to it) both in family setting as well as public domain. In one hand the entitlement for men (which create proneness of violence against women is still strong) on the other hand, seeking help become a signed of weaknesses – when they feel, their violence act is actually not the right things to do. Considering that situation, the progress that has been achieved so far can be said as promising towards gender transformation and although it is still a long way to go, it can support the prevention of violence against women and children.

Citizen orientation
This effort is made to manifest the synergy between women and men. In general, both women and men do not like to be in conflict situations. In particular, women victims of violence do not want to be separated from their spouses, but they expect their partners to change. Efforts for male inclusion through campaigns and counselling are conducted to promote more positive values for women, men, both children and adults, in attempt to which can minimise the risk and impact of violence. Based on the experience of accommodating victims of violence from 2002, it was found that majority of women victims of violence did not want a divorce, they wanted their husbands to change and they could return to the household well. On the other hand, many men do not understand that their behaviour - as a result of parenting, culture, religion - is an act of violence and hurts their spouse or child.

Research and Insight
This Case Study has been made based on Pulih Foundation experience (Internal Evaluation Report and Report from Pulih Counselling Center), Annual report for MenCare + and Prevention + Based on the results of work of these two programs, we get the insight that:

1) Men want to be involved in parenting but they do not understand how to do it.
2) Men need to be viewed as clients, partners, and agents of change.
3) Gender awareness should be shared both to women and men. Strong cultural and community norms often made women sees their role as natural and disturbed whenever men want to play a role in it.
4) Male inclusion should be ensured to go hand in hand with the prevention of violence against women instead of providing new privilege to men.
5) It is important to use positive and non-blame messages, and to be incentivized.

In the activities of Pulih, among others with the program MenCare+ and Prevention+, Pulih tried to campaign, advocate, and also develop capacity building to various parties that felt could be a key point for the change.

Segmentation
This activity is devoted to the urban community in Jakarta. One of the specificities of urban society is the difficulty of making activities that take place on a regular basis, for that, specific media chosen and approach for the campaign become important. In particular, the program is targeting young men aged 15 - 35 Years. We targeted high school kids and also prospective young fathers or fathers. They are considered to be more potential to change, especially for young fathers because
they tend to be eager to engage in parenting, and they are also more open to the current state of society. The influence from global campaign, celebrities which promotes engagement in fatherhood also become positive influence for these target.

**Value**
The purpose of this campaign is to establish a more equal relationship between women and men, so that violence can be avoided. In addition to the existence of equality, it is expected to also increase the productivity of each party.

**Competition**
The main competitors of this program is actually the existing social norms and also some religious teaching as well which sometimes become the contrary for the value and also behaviour that is introduced in this program (e.g. men should be strong and tough and no need to seek for help). To be able to sustain in the long run, elaboration with the current social norms is actually needed, by maintaining the good one and try to be open and discuss the negative one. The discussion at all levels expected to create a change of mind set in relationship between men and women. So that the efforts of this change can remain in line with the situation that already exist and acceptable to society. Therefore we are targeting young men because they are more open, show interest and many times questioning some practice and values that intrigue them. So, the right information expected to encourage behavioural changes in them.

**Theory**
This paper, will presenting the theory of change, the dynamics and connection between activities that has been conducted so far in Indonesia using Socio-ecological model and also, the system thinking behind the approach. How this actually has created the change and increase the male clients coming to the clinic.

**Social Marketing Intervention Mix**
The Social Marketing Intervention Mix for this program are as followed:

All the Social Marketing Intervention Mix for this program has been directed aim for the behaviour change of men – to seek for help (through male counselling) when they are aware that they have problem which may lead to inappropriate response in a relationship (e.g. the use of violence). This is not easy, considering the social norms attached to them, it may cause on them being seen as weak or not men enough (which become a psychological cost for them). In terms of availability of services (the place for male counselling as well as the trainer) currently it is still very limited.
However, considering, it is a pilot and there will be continuous effort, it is expected that in the future there will be more Center/ clinic which is capable to conduct male counselling, specifically for the case of violence against women.

The campaign was carried out by conducting road shows in high schools, discussions with college students, disseminating information using social and mass media, thematic meetings with men, conducting training to focal parties (NGOs, police, some caring communities), and together with the network of advocating specific law to the government. The people, counsellors that has been trained are also need to be increased so that the process (of counselling) are widely available in order to prevent violence against women.

**Partnerships**

In MenCare+ we partnered with Riffka Annisa Yogyakarta, PKBI Lampung, PKBI East Java, Alinasi New Men and Rutgers WPF as donors. While in Prevention+ we partnered with Riffka Annisa Yogyakarta, Damar Lampung, Rahima, Alliance of New Men and Rutgers WPF as donor.

**Evaluation and results**

There is an increasing number of clients who consulted at the Pulih Foundation either men or women. In general, they become more aware of some issues of violence and are encouraged to counsel in order to comprehend what they are experiencing.

As a result, by 2014 the number of male clients in Pulih Foundation is 27 people, by 2015 is 49 males, by 2016 is 49 males, and in 2017 increase to 103 males. Men come to Pulih, initially more related to parenting issues (custody, understanding children's behaviour), or experiencing violence by their spouses. However, as time goes by, there are men who counsel with regards to their personal issues unrelated to their spouses, or in an attempt to understand their relationship with their spouses, or to make changes to their violent behaviour.

Other related results are:

1) There are regular requests from some universities, especially the faculty of Psychology to discuss specifically about male involvement and male counselling. This is new initiative because previously gender-related material has not been considered as a material that must be given to students.

2) There is a decree to counsel for men who reportedly committed violence by their partners. Currently in trial stage in 2 areas of Depok and East Jakarta.

3) The mobile-related mobile applications need further encouragement since it is related to the development of creative ideas that still compete with the current public interest.
**Lessons Learned**

Lessons learned from this activity are:

- Turns out that men who want to be involved in care giving, need accessible information about healthy relationships and nurture, whilst this information can be transferred through learning forums, social media, or even utilising interactive mobile application.

- There is a change in the results of behaviour change counselling, where counselling services are still required. In that case, the men's counselling program requires an explanation to the partners / community about how to counsel perpetrator, to make expectations of behaviour change more realistic because not all parties understand the definition of behaviour change counselling. Many people expect behaviour change to occur in a short and permanent time through counselling. In this regard, it is necessary to increase the number of psychologists and counsellors interested in this. To counsel men, one needs to understand the perspective of violence victims first, and this is a challenge because not all psychologists / counsellors have this perspective.

- Campaigning and mobilising communities with positive messages and using public figures as role models keen to be more effective to provide early interest to find out more about this activity. People prefer to ask public figures rather than with psychologists and counsellors so it would be good for psychologist to partnered with public figures in public discussion and prepared material together.

- The selection of media for campaigns needs to be adapted to the conditions of society. As an NGO, Pulih Foundation must also learn to adapt this condition so it is imperative to change the logic of thinking by also considering changing the community system and not just focusing on the delivery of ideas alone.

- Learning to mainstreaming male involvement strategies in an agency will be most effective when it comes to finding a key person in the agency who has the capacity, power and commitment.

- The need to document, evaluate, research, and publicise a strategic and significant to obtain strong and scientific evidence as the basis for further development of this activity.


**References**


Is health information in magazines really healthy?

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Introduction, Background
Healthy lifestyle behaviours relating to diet, physical activity and alcohol consumption have low adherence (Ford, Zhao, Tsai, & Li, 2011; Loprinzi, Branscum, Hanks, & Smit, 2016), which may be due to lack of awareness and knowledge. Popular media could be an influential source of health information. Some consumers regularly and actively engage with it, including information about healthier lifestyles. But, even if they do not intentionally consult the media for such information, they might still be passively exposed to health information via magazines, television and social media, including through paid-for advertisements (Schwitzer et al., 2005; Wilson, Smith, Peel, Robertson, & Kyprı, 2016). Because popular media may have considerable influence on the information consumers get about health behaviors, it poses great competition to the communication of evidence-based health information from health professionals. The media competes for people’s time and attention and can influence consumers' health knowledge and behaviour. The quality of this information is questionable, as a lot of health information in the media is communicated by health journalists, self-claimed health professionals, celebrities, paid-for advertisers and the general public (Schwitzer et al., 2005). A greater understanding of the information that consumers may actively seek out and be passively exposed to in the media is required, as it may contribute to health knowledge and eventually influence health behaviours (Basic & Erdelez 2014; Longo 2005).

Magazines continue to have high readership in Australia, with 80% of people reading magazines (Roy Morgan, 2014). While consumers can actively seek out health information, passive exposure (i.e. unintentional exposure to health articles and advertisements) is often overlooked (Basic & Erdelez 2014; Longo 2005), however it can still influence consumers. Currently, prevalence of health information regarding healthy lifestyle behaviours in Australia’s popular magazines is unknown (Wilson et al, 2016), especially for information presented in both articles and advertisements. This study aims to determine (1) the prevalence of health information available to consumers via popular (high reach) magazines, in both editorial and paid-for advertisements, and (2) the quality of health information in those magazines.

Method
Content analysis (Mayring, 2000) was conducted on popular Australian magazines (available in print and/or online). First, prevalence of health-related content was determined for one issue of each of the top 30 magazines, based on the level of readership (as reported by Roy Morgan, 2014), in order to assess what health-related content is reaching the most consumers. Prevalence was determined by counting the number of health and non-health related advertisements and articles as a percentage of all articles and advertisements, also noting those related to key health behaviours (diet, physical activity and alcohol consumption). Recipes (without additional health information) were not included. Within the top 30 magazines, those that comprised at least 20% health-related content (n=12) had an additional two issues analysed (three issues of each, total n=36) for prevalence (to ensure consistency of prevalence over multiple issues) and were then assessed for quality. Four trained research assistants assessed quality by establishing whether the articles were referenced by credible sources (i.e. academic references, government reports and guidelines etc).
and/or had a qualified author (i.e. health practitioner, researcher etc), and comparing the presented information with relevant guidelines from the World Health Organisation and Australian Department of Health. Information not featured in the guidelines was compared against the best available evidence from high quality studies (i.e. systematic reviews, reviews and RCTs). Inter-rater reliability was 85% for extraction and analysis. Decisions regarding consistency of the information with evidence was made by at least two coders.

Results/Findings
Australian consumers have exposure to a significant amount of health-related content, in 61% of articles and 50% of advertisements in popular high-reaching magazines (not just those related to health). Quality of health information varied (Table 1).

Table 1: Prevalence of health-related content and quality of health information in articles and ads

<table>
<thead>
<tr>
<th>Topics</th>
<th>Prevalence</th>
<th>Quality of health information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% health ads (n=466)</td>
<td>% health articles (n=397)</td>
</tr>
<tr>
<td>Diet</td>
<td>75</td>
<td>56</td>
</tr>
<tr>
<td>Physical activity</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>23</td>
</tr>
</tbody>
</table>

Of 159 articles communicating health information, few were supported with credible references (35% for diet, 31% for physical activity and 25% for alcohol). Half of the alcohol articles containing health information were written by qualified authors, but far fewer were for diet (8%) and physical activity (7%). Yet, the majority of the health information was consistent with evidence to some extent. 71% of diet information provided information or gave recommendations that were supported with evidence (i.e. health benefits or recommended intakes of a particular food or food group), however none of the articles discussed the importance of an overall healthy eating pattern as per the Australian Dietary Guidelines. Similarly, of the 79% of articles that promoted physical activity, only 26% mentioned strength and cardio training and only 8% also mentioned limiting sedentary activity, as per the Physical Activity Guidelines. All of the articles advising on alcohol intake had a general message that was consistent with the recommendation of moderate alcohol consumption. Yet, 50% of the articles were vague about quantity and frequency. Advertisements with diet-related information made claims about their products that were consistent with evidence, but once again lacked promotion of an overall healthy diet.
Consistency with evidence could not be determined for physical activity advertisements, mainly due to the claims being about a specific product function for which research could not be sourced. Alcohol advertisements were purely brand promotion with no health information included.

**Discussion and conclusion**
Magazines do compete with information provided from health professionals and should be considered as a prevalent information source (however credible). Overall, there is an absence of credible references in popular Australian magazines – including government guidelines, qualified authors and academic literature. While the health information is generally consistent with the evidence, this information often lacks broader context of the healthy lifestyle behaviours (i.e. overall healthy dietary patterns, increasing exercise and reducing sedentary time). Furthermore, at least a quarter of health information is not consistent with evidence and could be detrimental to health. Although magazines are predominantly for entertainment value and commercial purposes, we propose two possible approaches: (1) greater collaboration between journalists and qualified professionals, and the inclusion of credible references, to increase the prevalence of evidence-based healthy lifestyle information in magazines and (2) a potentially more feasible approach health professionals use consumer insights from social marketers and advertisers to translate their evidence-based knowledge into simple, interesting and engaging content. As the present study focused only on magazines, future research should consider the evolving media landscape, emerging media platforms and the rise and influence of social media personalities and online bloggers in the health communication space.


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Paper Session: Creating and Accessing Value

Session Chair: Nicholas Goodwin
The role of Behaviour Centred Design in creating value to sustain impact of social marketing: evidence and experience from Indonesia, Timor-Leste and Bangladesh

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Project/Issue Overview
This paper will introduce the themes of a paper presented as part of a proposed panel session that discusses how social marketing programs create, share and communicate value to sustain behaviour change. This paper will reflect on the author’s recent work in Indonesia, Timor-Leste and Bangladesh using the principles of behaviour-centred design. In Indonesia, work on legal identity, such as promoting birth certificates, shows that the nature of value differs across segments, sometimes made up of people in the same household. In Timor Leste, value for improved sanitation relates to emotional drivers such as comfort and safety, with health a low priority. In Bangladesh, formative research for a cluster randomised controlled trial of clean cookstoves has determined the main benefits are a mix of utility (speed and ease of use) plus affect (time with family). The paper argues that creating, sharing and communicating value for consumers, using the principles of Behaviour Centred Design (BCD), are a useful framework for sustaining impact in public policy and services (Aunger & Curtis, 2015).

Background and social context
A value exchange consists of what two parties will give in order to receive something of benefit to them. Value exchange frameworks can be used to analyse the confluence of supply and demand, with both sides of the exchange giving and receiving something of value. Some say value has multiple dimensions, some of which are considered to be independent of one another, while others are inter-related. Four common dimensions of value are often discussed: functional (also called economic), social, altruistic, and emotional (Barrington et al, 2016; Zainuddin et al, 2013; Russell-Bennett, 2009).

Traditionally, consumer value has drawn from economic theory that defined it as a function of benefit and costs. More recently, some have questioned this adherence to economic theory and offered alternative theories, one of which is customer value. The experiential approach to customer value goes beyond the economic utility of a transaction and examines value during the consumer journey. Additionally, the service-dominant logic perspective that the customer is not a passive receiver of a service, rather they actively co-create value together in service with other actors. There is a growing body of work and research where clients are active participants and creators of value along with firms, stakeholders and
Discussion of the issue/concept/idea/problem

Programs that aspire to change behaviour need to do more than just understand the drivers, or ‘active ingredients’, of behaviour change processes. The Behaviour Centred Design (BCD) framework offers a methodology for designing, delivering and evaluating behaviour change programs. It is inspired by theory and is based on application experience of designing behaviour change programs to change different kinds of behaviour (e.g., handwashing, food hygiene, sanitation, infection control, child nutrition, women’s nutrition, exercise and product use). The BCD approach organises the program development and execution process into five consecutive steps - best remembered using the mnemonic ‘ABCDE’ (Aunger & Curtis, 2015):

• Assess: determine what is known and unknown about current and desired behaviours and their determinants
• Build: fill in the knowledge gaps by collecting data (e.g., through formative research)
• Create: produce the concepts and materials that will have an impact on the program objective
• Deliver: execute the plan to expose the target population to the program’s activities
• Evaluate: determine whether the predicted environmental, psychological and behavioural changes occurred

The following are three examples of programs the author is involved with that have drawn on the BCD approach, either in part or fully. In Indonesia, the author undertook a behaviour change review for the KOMPAK program, including examining a successful legal identity project. The project mobilized decision makers and community leaders to convince parents to apply for birth certificates, with excellent results including 100% coverage in one village. However, this top-down approach is likely to not be sustainable as citizens made the change not based on value of the benefits but because of coercive power (Goodwin, 2018).

In Timor-Leste, the author co-led a study on creating value for households on improved sanitation and handwashing with soap. The study found comfort, cleanliness and safety as the benefits driving sustainable change. This led to the development the marketing strategy and implementation of the Moris Mos (Clean Life) hygienic initiative. The program brand combines emotional and utility benefits to ensure value for households and their communities (Wibowo et al, 2017).

In Bangladesh, the author is part of a University of Sydney and ICDDR, B team implementing an RCT to compare an intervention consisting of clean cookstoves and behaviour change communications with a control group. The formative research is currently being undertaken using a discrete choice framework to identify the benefits and determinants to correct and consistent use of the stoves.
Practical and Conceptual Implications

The common thread between these case studies is the creation of value through understanding the barriers and benefits to change and the process to address these. This will help ensure that social marketing will produce sustainable impact on human development. Despite advancements made in understanding value, its creation and distribution, there is very little work on how to translate this into improved service delivery, including as programs and interventions. Within any community, people will enter into different types of value exchanges to gain access to products or services. If we understand the exchanges that people are prepared to enter, we can better support those relationships and sustain human development outcomes. This will ensure that investments in social marketing programs do not fade and that policy can support their sustainability and efficacy.

The BCD approach to value creation is conceptually a ‘backwards mapping’ process, beginning with a long-term goal (i.e., impact) and working backwards through a chain of mechanisms towards the earliest changes that need to occur, the intervention. In backward mapping one builds the outcomes pathway starting at the most general and longest-term outcome, then drills down by identifying each set of preconditions, ending at the most particular, immediate, and short-term outcomes to be achieved. An intervention has to change something in the environment, which has to change something in the brain and/or body of the target individual, which then has to impact on behaviour. The aggregate of these individual behaviours then has some impact on the “world” in which the group, community or nation operates (Aunger & Curtis, 2015).

Social marketing has a focus on understanding the consumer, behaviour as well as the value exchange process, as well as its emphasis on competition, segmentation and the marketing mix. It lacks an agreed coherent framework for application of its principles in the real lives of individuals and their communities, one that keeps value at the centre. The BCD approach brings that stepwise structure to value creation and provides the tools for program managers, policymakers and researchers to use it at any stage of the intervention life cycle.

Lessons Learned and Recommendations

The lessons learned from all three case studies include that program managers, policymakers and researchers alike should base their programs and services on a strong understanding of the consumer and supplier benefits and barriers to change. This understanding should be based on quantitative analysis of the priority benefits, such as through best-worst case experiments. Further, formative research should be undertaken into the user journey to understand the points where interventions can add value to the exchange process for either one or both parties involved.

The BCD approach is unique in being able to encompass factors ranging from the psychological to the macro-sociological in one coherent conceptual framework issuing from behavioural theory (Aunger & Curtis, 2015). Other approaches tend to be concerned with only parts of the behaviour change chain. Health psychological and behavioural economic
models, for example, typically focus on individual psychology, and while social ecological models extend from micro- to macro-scale social groupings, they are not clear about methods to change behaviour. BCD sets out clearly a chain of events that must occur to generate behaviour change, and provides a range of theory-based tools to do that. Combined with social marketing, especially the elements of competition, segmentation and the marketing mix, BCD offers a powerful approach to social and behaviour change that has the potential to test new solutions and scale up solutions to improve people’s lives across the world.


References


Creating value and sustaining impact in WASH: insights from the Partnership for Human Development program in Timor-Leste

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Project/Issue Overview
The Partnership for Human Development (PHD) works with various stakeholders in Timor-Leste including government and communities to achieve two levels of sanitation improvement as specified in the Timor-Leste National Basic Sanitation Policy: the “Open Defecation Free” (ODF) status and the “Hygienic Status”. In 2015-2016, PHD conducted ODF Timor-Leste Initiative, a pilot program in Bobonaro Municipality which has successfully increased household toilet coverage from 47% to 94% in twelve months. The verification data indicated that 70% of houses in ODF communities have improved toilets. A formative study conducted in Bobonaro Municipality in 2017 found that around 80% of households have used their own improved sanitation facilities while around 20% still used unimproved sanitation facilities and open defecation.

To achieve the Hygienic Status, PHD will continue to conduct the sanitation and hygiene program. PHD has proposed Moris Mos (Clean Life) Hygienic Initiative, a pilot program to provide improved sanitation services and products to communities in Timor-Leste. The proposed Moris Mos Hygienic Initiative will need to ensure households remain ODF, encourage the 20-30% of households who still used unimproved sanitation facilities and open defecation to adopt improved sanitation, upgrade toilets, promote handwashing with soap at critical times, and dispose child’s faeces correctly. Thus, it will help break the transmission of pathogens and support communities to be healthier places to live.

Background and social context
Safe drinking water, sanitation and hygiene (WASH) have long been recognised for positive impact on human development. Diseases related to poor water, sanitation and hygiene are major causes of mortality and morbidity (Prüss-Ustün et al., 2014). Diarrhea and pneumonia are the two leading causes of child mortality globally, contributing to more than two million deaths annually (Liu et al., 2012; UNICEF, 2012). Improved sanitation and hygiene, combined with access to safe water, are proven public health interventions (Cumming & Cairncross, 2016).

Timor-Leste has made progress in ending open defecation, and improving sanitation and hygiene behaviours through engaging local leadership and their communities. Overall the trend is positive, with open defecation at 47% in 2005, 36% in 2010 and 32% in 2015. The
Government of Timor-Leste’s Strategic Development Plan (2011-2030) states that by 2030, all citizens will have access to clean water and improved sanitation (Government of Timor-Leste, 2011).

**Discussion of the issue/concept/idea/problem**

A 2017 sanitation and hygiene assessment undertaken by Wibowo, Goodwin et al. revealed that household perceptions of both the benefits of improved sanitation and the motivators for taking action to upgrade. 75.6% said good sanitation meant increased comfort, whilst 34.1% reported it meant increased safety for women, especially at night and for children. The most common preferred toilet qualities and desired attributes were: no smell of urine and excreta (76.2%), durable and long lasting (62.8%), no sight of excreta (44.7%), and easy-to-clean surfaces (32.1%). One of the main motivators for improving sanitation is to ensure durability of the toilet – a rational benefit. Common aspects can be found with both durability and safety, which share elements of strength and security.

_Moris Mos_ (Clean Life), the proposed brand platform for the PHD Hygienic Initiative Campaign, is being developed as a set of associations that communities hold with the health-related sanitation and hygiene behaviours. The possible associations that _Moris Mos_ brand may want to have will come from emotional and rational benefits from adopting improved sanitation, upgrading toilets, handwashing with soap at critical times, and disposing child faeces correctly. They will come from the benefits the customers may care the most about (see Table 1). As each individual has different perception towards benefits of improved sanitation and hygiene, the _Moris Mos_ brand will highlight these emotional and rational benefits.

**Practical and Conceptual Implications**

The _Moris Mos_ brand campaign will be tailored to diverse audience segments from general audience to the three focus segments - Champions, Aspirationals, and Vulnerables. The messages for the general audience will be focusing on handwashing with soap, and correct disposal of child faeces while the messages for three focus segments will be based on their current WASH practices as follows:

- **WASH Champions.** As this segment consists of households with an improved toilet and plan to upgrade, and have specific place for handwashing at home, the campaign will focus mainly on maintaining their “champion” WASH related behaviours such as the maintenance and cleaning of toilets to maintain household satisfaction with household toilet. The campaign for toilet upgrade can also be developed as additional campaign themes. This group could also be used as change agents to act as models for the communities for the other segments.

- **WASH Aspirationals.** As this segment consists of households with an improved toilet and plan to upgrade, but no specific place for handwashing at home, the campaign will mainly focus on encouraging households to upgrade their toilet. The campaign
themes will focus on how to upgrade from semi permanent toilet to the permanent one. This campaign themes will highlight the options for toilet upgrades such as the materials for the upgrades, the toilet options, the benefit of upgrading toilet, and so on. As the WASH Aspirational size was found to be the largest group, this group should be a major focus and the potential for change.

- **WASH Vulnerables.** As this group consist of households with an unimproved toilet, no intention to improve/upgrade and no specific place for handwashing at home, the campaign will cover several themes particularly to the households who still open defecate and those who have an unimproved toilet. This group need immediate and intensive support as they lack many of the desired behaviours, they also have the potential to act as a negative model for the community to emulate. The campaign theme mainly will focus on the perceived benefits of improved toilet: more private, safe especially at night, healthier and cleaner.

- **General Hygienic Initiative Campaign** will focus on handwashing with soap (HWWS), and correct disposal of child faeces as these issues are still a major public health problems in all segments. The campaign will focus on the provision of information on the correct disposing children’ faeces. It was revealed that household knowledge of the critical handwashing times is good, however reported HWWS practices are low. The HWWS campaign will focus on encouraging households to build handwashing with soap facility in the home and to promote households’ emotional and rational benefits of HWWS that are valued by them.

**Lessons Learned and Recommendations**

The Moris Mos campaign will use multiple or non-traditional channels as there are many factors that affect message reactions and receptivity of communication materials. Tulodo with HealthNet will develop a set of engagement activities, including non-traditional channels as the primary vehicle of communications and participation. Social media channels will also be used as secondary vehicle to reach broader audiences.

In developing communication materials, the Moris Mos brand will consider the benefits of the new behaviour(s) most valued by the target community. The Moris Mos brand will also explore the target audiences’ motivation for change such as their emotional, physical or social drivers. Logo development, channel selection, promotional messages, and other brand development components will consider these elements in the brand development strategy. Pretesting materials will be conducted by HealthNet to evaluate target audiences’ reactions and receptivity towards the Moris Mos brand and communication materials produced.

These benefits and motivators for change are interlinked and must be addressed as part of the Moris Mos hygiene program. The program will communicate the value of the change to
households and facilitate access through the vouchers and partnerships with suppliers. This ensures support for exchanges of value which are sustainable in Timor Leste, vital to its human development.


References


Introduction
Community attitudes toward people with disabilities is an important determinant of social inclusion, and stigma has been identified as a significant debilitating factor in achieving such inclusion (Walker & Scior, 2013). Stigmatisation affects many aspects of life for people with disabilities and is a barrier to social engagement and employment (Deane, 2009; Gartrell, Jennaway, Manderson, Fangalasuu, & Dolaiano, 2016). Although recent research suggests that stigmatisation is still a barrier for people with a disability, theoretical analyses of the concept of stigma, the extent to which it still exists and the marketing strategies most likely to overcome are scant (Corrigan & Gelb, 2006). A recent review of disability-related attitude research suggests that using positive message framing, emphasizing that people with disabilities are just like everyone else, and depicting positive interactions between people with disabilities and others are all features of effective attitude change campaigns (Randle & Reis, 2016). However, a theoretical examination of the concept of stigma, and the specific components of stigma that may be driving its presence in modern-day society is yet to be conducted. Understanding the specific components of stigma would help marketers understand the issues that need to be addressed in social marketing campaigns such that the stigma associated with having a disability can be reduced going forward. To address this gap in knowledge the present study poses the following research questions: (1) Does stigma exist for people with disabilities in modern-day Australia? if so, (2) What is the nature of this stigma?; (3) What types of marketing strategies are likely to be most effective in reducing this stigma? The theoretical framework for this investigation is Link and Phelan’s (2001) conceptualisation of stigma. According to this framework, stigma is present when four interrelated
components come together: i) labelling – distinguishing and labelling differences; ii) stereotyping – linking labelled individuals to undesirable characteristics; iii) separation – putting labeled individuals into distinct categories, into “us” and “them”; and iv) status loss and discrimination – leading to unequal outcomes.

Method
A qualitative approach using semi-structured interviews was used to produce detailed insight into the experiences of people with disability within the community. Thirty three individuals participated in the present study. Fifteen were consumers of disability services (either because they had a disability or cared for someone who does), and 18 were disability service providers (e.g. managers of disability programs). Purposive sampling was used to identify a wide range of consumers and service providers in terms of perspective (disability service workers, people with disabilities, carers), disability type (intellectual, psychiatric, physical), and sociodemographic characteristics (age, geographic location) so as to gain as wide a range of views as possible. Participants were recruited through local disability service providers and by snowballing. Interviews were conducted face to face at locations chosen by participants. The research was approved by the university Human Research Ethics Committee, and in accordance with best practice in qualitative research (Miles & Huberman, 1994; Silverman, 2010), all participants gave informed consent prior to being interviewed and recorded.

The semi-structured interview guide consisted of open-ended questions exploring community attitudes toward people with a disability. For example, “Generally speaking, how would you describe community attitudes toward people with disabilities?”; “In your experience are there certain types of people who are more likely to have positive attitudes towards people with disabilities?”; “Do you have a view on what could be done to improve attitudes?”. Participants were encouraged to give examples of their own experiences within the community or the experiences of others that they were aware of. Importantly, none of the questions included the term “stigma”. Instead, questions were framed around the issue of community attitudes. This was done deliberately so as not to lead participants to directly discuss the concept of stigma. Instead, the researchers were interested to examine whether, in participants’ discussion of their experiences, there was evidence that stigma is present. The framework method of qualitative analysis (Gale, Heath, Cameron, Rashid, & Redwood, 2013) was used to systematically organise the interview data into pre-determined categories. Data was analysed to identify whether there was evidence for each of the elements of Link and Phelan’s stigma framework (Link & Phelan, 2001, 2006).

Results
Analysis of the qualitative data produced evidence for all four components of stigma. Labelling. Participants discussed the label “people with a disability”, and felt that before they even had a chance to prove themselves this communicated that they were not as good as other people. For example one participant stated, “The word disability [...] has always sounded like you’re unable to do it”, while another stated “Less able. That’s literally what it means. So it’s not surprising that that’s what employers think the person will be”. Some participants suggested alternatives that
would be less negative, e.g. “I try and refer to it as someone who's differently enabled, rather than saying that they are disabled”.

**Stereotyping.** Participants identified various negative stereotypes associated with having a disability. Commonly, these related to being less intelligent than other people, e.g. one participant stated “I get treated like I’m dumb and stupid” and another said “My neighbour thought that I would fail it [Certificate iii] and that I would drop out”. Other negative stereotypes related to being unpredictable, especially people with mental health issues, e.g. “They're so erratic and all over the shop” and “If it’s mental health, they’re a bit crazy”.

**Separation.** Participants identified numerous examples of separation. These included instances of physical separation: “Even our expos, you can see people are a bit scared to walk past and stop” and also separation in the language used when referring to people with disabilities. For example “They’re unreliable”, and “They can’t be having children”.

**Status loss and discrimination.** Numerous examples of discrimination were reported by participants. These related to different contexts, for example the workplace: “I’ve tried to get a job, [...] as soon as they hear the word ‘disability’ they're like, “Sorry. See you later” and also in their personal and social lives “Nobody talks to you or anything...they're not so open”.

**Discussion and conclusion**
This study illustrated the usefulness of stigma theory in understanding the factors that contribute to stigma for one vulnerable group within the population, and the types of marketing strategies likely to be effective in reducing stigma for people with a disability. All four elements of stigma were identified in the way participants talked about their experiences within the community. Findings have implications for social marketing practitioners interested in reducing stigma toward people with disabilities. Although now considered politically correct, the label “person with a disability” was seen to be negative and to convey the message that the person was literally less able than others. Participants discussed that although their abilities were not the same as other people they were not less valuable and should therefore be referred to as different but not less. This is an important consideration for social marketing campaigns and policy makers in terms of the language used to communicate with the community and also in government documents. The existence of stereotypes suggests that there is still a role for marketing to play in educating the community about people with disabilities, that they are all unique individuals just like the rest of the population. **Separation**, particularly in the language used to refer to people with disabilities, is an important consideration in social marketing campaigns. Language should be inclusive rather than divisive. Finally, **discrimination** still occurs in modern society and requires education regarding the abilities of all people and their positive attributes such that people are appreciated for their individual qualities and not discriminated against for their differences.

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Religious References in Health Campaigns: Perceptions and Motives

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Background

Seventy percent of annual global deaths, approximately 40 million deaths/year, are attributed to non-communicable, chronic diseases such as cardiovascular diseases, cancer, diabetes and lung diseases (World Health Organization, 2017). It is generally accepted that lifestyle factors and associated behaviours such as physical inactivity, smoking, and unhealthy diets are largely driving the increasing prevalence of such non-communicable diseases (NCDs). Countries and governments worldwide are shouldering a growing social and economic burden to mitigate the health and other related complications including increasing morbidity and mortality associated with those diseases making them a global pandemic with disproportionately higher rates in developing countries, including many Islamic nations.

In line with social marketing theory, influencing health related behaviours requires a holistic focus on lifestyles and in many societies, including Islamic countries, religion is still a dominant force in shaping and influencing people’s behaviours. Religion frames the cultural contexts of societies, in spite of the ongoing modernization efforts and economic developments in many countries (Inglehart and Baker, 2000; Smelser and Swedberg, 2010). This is particularly true for the Islamic faith because its teachings encompass and govern all aspects of life including political, economic and social interactions, in addition to business activities.

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1 Marwa Al Hinai is a PhD candidate at the University of Edinburgh’s Business School, UK. She is also a lecturer in Marketing at Sultan Qaboos University in Oman. Her research interests are in the areas of Social Marketing and behavioural change, health marketing, advertising and consumer behaviour.
Despite growing evidence of the positive relationship between religion and health, western researchers and practitioners often argue against the intentional inclusion of religion in social marketing or behavioural change campaigns (Van Esch et al., 2013). This in turn has arguably led to religious elements receiving limited attention by social marketing researchers and practitioners in the west (Frank and Kendall, 2001). Thus, this gives rise to the question of whether, and how, religious references are used or manipulated, and whether they are perceived similarly by practitioners involved in designing health campaigns in an Islamic cultural context.

The Cultural Context
Oman is located in the southeast coast of the Arabian Peninsula, and is considered the oldest independent state in the Arab world, with a population of approximately 4 million. Islam remains central to the Omani identity, with the majority of the country’s citizens being Ibadi Muslims, which is a moderately conservative but tolerant sector of Islam. The World Bank currently classifies Oman as a high income developing country and it is one of only a few countries that has managed to achieve a notably high rate of progress against social and economic indicators (Buckley and Rynhart, 2011). In addition, the United Nation’s Human Development Report (2010) listed Oman at the top of the world’s 10 leading countries that have made the greatest progress in recent decades in public health. Oman was amongst the first countries in the region that have created a National Multi-sectoral committee to address NCDs, and was the first high income country to receive a United Nation’s integrity task force on the control and prevention of NCDs in 2016 (World Health Organization, 2016).

Religion and health related behaviours
All religious teachings and texts have a similar global message for humanity but the means by which this message is articulated and conveyed differs (Cyril De Run, Mohsin Butt, Fam, & Yin Jong, 2010). Islam, as a religion, has a distinctive character embedded in its political ideology where religion is an integral part of statehood in Muslim countries, thus secularization is impossible in Muslim societies, making the behaviours of Muslims largely influenced by their faith. The effect of religion, in general, is evident in how Islamic tenets shape people’s goals and motivations across various aspects of life (Ellison and Cole, 1982). Thus, it is argued that religion can play a significant role in influencing human behaviours and attitudes (Armstrong, 2001), particularly those related to health and wellbeing (Frank and Kendall, 2001, Weaver et al., 2006).

In the health and medical fields, religion has been increasingly acknowledged for the role it plays in shaping people’s understanding of, and engagement with, health related attitudes and behaviours (Chatters, 2000). Researchers have found that individual religiousness or spirituality is largely associated with numerous health and well-being indicators (Hackney and Sanders 2003; Koenig et al. 2001; Powell et al. 2003). Health can be directly and indirectly influenced by religious beliefs as illustrated by Koenig et al (2001, 2011). In
addition, positive religious adherence is associated with more health conscious choices to improve mental and physical wellbeing such as physical activity and healthy diets (Wallace Jr and Forman, 1998, Taylor and Brown, 1988). Therefore, understanding whether and how religious references are incorporated and utilized in health campaigns is important.

**Social Marketing**

Social marketing has been widely embraced by many countries as a tool for influencing the behaviours of individuals in areas related, but not limited to, health promotion, injury prevention, environment protection and financial welfare (Lee and Kotler, 2011). The health domains of western developed countries, in particular, have been largely dominating the field of social marketing (Truong et al., 2015), with the United Kingdom’s government being the first to incorporate social marketing in its public health policy (French, 2010).

The definition, and domain, of social marketing have been widely debatable and hotly contested by marketing scholars and practitioners (French, 2016, Lee and Kotler, 2011), resulting in numerous developments and definitions. Despite the ongoing developments in the field of social marketing, the focus on behavioural change remains a core concept of social marketing theory and practice (French & Russell-Bennett, 2015). That said, Studies affirm that religious beliefs play a significant role in influencing social behaviours and health related behaviours (Frank and Kendall, 2001, Shatenstein and Ghadirian, 1998, Maltby et al., 2010, McCullough et al., 2000), however, it is unclear whether social marketing practitioners in health institutions can identify and accept the link between religion and health, and how they perceive the role of religion in their health campaigns. This paper investigates: 1) how, if at all, religious references have, and continue to be used, in NCDs public health campaigns in Oman and 2) the perceptions of health educators regarding the use of religion to influence, and change, health related behaviour.

**Methodology**

Using a qualitative research design, semi structured face-to-face in-depth interviews were conducted with a sample of Omani health educators (n= 20) who are responsible for designing and implementing health campaigns. The aim was to determine their perceptions, and acceptance, of the utilization of religious references in health campaigns. This study applied a purposive sampling technique, where participants were chosen according to their relevance to the subject matter. A maximal variation purposive sampling technique was used, which involved the selection of a few cases, which were judged to be as different as possible, in order to capture the array of variation and differentiation in the field (Kuzel, 1992; Cao et al., 2002). Therefore, health educators had varying backgrounds, and were selected from four different regions of the country: Muscat; Dakhiliyah; Sharqiya; and Batinah. All the interviews were conducted in Arabic, and were recorded with the consent of the participants. Upon completion of the transcription process, the data was translated to English by a local professional certified translators, in order to preserve the meanings of the words. In addition, the lead author, a fluent Arabic speaker and Omani citizen, performed
back translation to validate the accuracy of the translation.

**Analysis and Findings**

The interviews were analysed by means of thematic analysis techniques, using the Nvivo software which aided with organizing and managing the data. Following the iterative process of coding and categorization, three main themes emerged: 1) Religion and health are merged in most campaigns; 2) Religious references motivate the audiences to change behaviours; 3) Religious references increase the credibility and acceptance of campaign messages.

1) **Religion and health are merged in most campaigns**

Many of the health educators stated that they always attempt to merge their campaign messages with religion. For example, a religious guide is usually invited to speak in their workshops and lectures in order to display the behaviour from a religious perspective. This technique has allowed them to attract more participants to their events, and therefore, the health educators have collaborated with the ministry of religious affairs to ensure that religious guides are supporting all of their campaigns, as is clear in the following quotes:

"Recently, if you notice we have a religious guide in every village hired by the Ministry of Endowments and Religious Affairs. Our work is associated with theirs; for example, we conduct lectures in collaboration with religious guides. We attract the audience through religious schools and guides"

It was evident through many health educators collaborate with religious guides and that incorporating religious references into their messages is considered almost essential for their campaigns.

2) **Religious referencing motivates the target audience to change behaviours**

Islam is a holistic religion which addresses all aspects of life, therefore, health educators discussed how including religious referencing in health campaigns is a motivational tool that encourages the target audience to change behaviour. This is because they believe that a stronger voice is encouraging them to change their behaviours, that of God, and not just the campaign developers or associated organization. This was clearly reflected by the following quotes:

"it (religious referencing) is important and very sufficient as it convinces people especially when you include verses from the Holy Quran, hadeeth and stories from the Journey of the prophet Mohammed (peace be upon him)...... This gives motivation and trust to what we say and for every issue there is hadeeth (prophet saying) about it, like birth-control, life-styles and smoking"

Therefore, the health educators generally perceived religion as a motivational tool that aids them in influencing the choices and behaviours of their audiences.
3) Religion enhances the credibility and acceptance of campaigns

The health educators discussed how including religious referencing is important when addressing controversial health related behaviours. Supporting a campaign message with a religious quote provides credibility and acceptance, and shields the message against any misconceptions by the target audience. This is reflected by S.A in the following quote:

“There are some issues where people believe that they are forbidden, like Birth Spacing. When we address them through religious beliefs, it helps them (the target audience) to accept it”

In addition, health educators revealed that campaign messages which include religious references from the Quran or prophet’s sayings, usually gather more number of likes on Social media platforms, compared to those which do not include religious references, as S.M explains:

“I have noticed in the last campaign when we have included religion, people had liked it and accepted it more, and the number of "likes" and responses on social media were higher for those with religious quotes”

However, some health educators mentioned that they consider religious references to be one of many tools which they rely on in crafting their campaign messages, and it therefore should be used in collaboration with other techniques, rather than independently.

Discussion and conclusion

The majority of health educators perceive religious references and prompts as a motivational technique which encourages their target audiences to adopt desired health related behaviours. This is in line with many empirical research studies which show that religious elements and orientations are predictors of positive healthy behavioural choices (Amonini and Donovan, 2005, Gäbler et al., 2017). Oman is considered a religiously conservative country, with a collectivist culture where families are very interrelated and socializing is valued. Religion plays a major role in guiding the choices of individuals in Oman which is due to Islam’s holistic approach to life in general but also to health and wellbeing in particular. Therefore, health educators believe that religion and religious figures are highly regarded by the Omani community, which is the reason why they tend to address health related behaviours from a religious perspective.

In addition, the importance of healthy eating and being physically active can be understood in the light of Islam which has addressed these issues for hundreds of years, unlike the health authorities who have started to address them in recent years. Therefore, relying on religious quotes to encourage and support health related behaviors in Oman provides a stronger voice to government bodies, and removes any speculations that the target audience may hold around the objectives of such campaigns. This is particularly important when addressing controversial issues related to women’s health such as birth spacing,
breast feeding, abortion and genital mutilation, all of which have been clearly addressed in Islam, although varying practices may exist in different cultures and nations.

Therefore, with the intensifying burden of NCDs in the world in general, but in developing countries in particular, seeking and enhancing existing preventative techniques through influencing positive health related behaviours is vital in order to reduce the economic and social burden of these diseases. Although growing evidence on the positive relationship between religion and health exists, the manipulation and usage of religious references in social marketing health campaigns has received minimal attention (Frank & Kendall, 2001). This paper has contributed to addressing this gap through investigating whether and how religious references are used or manipulated, and how are they perceived by practitioners involved in designing health campaigns in an Islamic country context.

The findings from this study indicate that there is wide reliance on, and acceptance of, utilizing religious references by health educators in Oman, with the aim of influencing positive health related behaviours. The religious adherence of Islamic societies, such as Oman, has facilitated the incorporation of religion in health campaigns, making it an essential and reliable motivational source, as perceived by health educators. However, a major challenge facing the health educators and campaign developers would be to ensure that they are not exclusively or excessively relying on religion to ensure positive behavioural change. In line with social marketing principles, their campaigns should incorporate a mixture of methods, besides religion, in order to successfully appeal to various audience groups and segments. That said, the utilization of religious references in health campaigns can be considered one of the core techniques used to influence positive health related behaviours in Islamic country contexts such as Oman. However, it is recognized that a limitation of this study is that the sample is entirely from a single country. Therefore, other researchers are encouraged to further investigate the perceptions of health educators regarding the utilization of religious references in health campaigns in other Islamic countries.


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Incorporating social marketing into healthcare facilities management in Ghana: A proposed framework

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**Abstract**

The traditional approach of dealing with healthcare facilities management (FM) matters seems to be inadequate and insufficient in bringing about quality in healthcare FM delivery, as it does not take into account processes that will assist patients in making their healthcare delivery choices. Thus, there is the need to come up with new strategies to help increase the efficiency of healthcare FM delivery, by facilitating higher levels of public acceptance and engagement in healthcare activities. The study aims to assist stakeholders of the Ghanaian healthcare industry to make the healthcare system more attractive and sustainable by using social marketing approach. It offers an understanding of what social marketing is, demonstrates its advantages over the traditional healthcare FM delivery by incorporating quality management principles into the planning and delivery process of healthcare FM in Ghana.

**Key words:** Social marketing, Healthcare, Facilities management, Ghana

**Introduction**

The concept of social marketing is now a well-established part of the marketing vocabulary in different sectors (Simon and Gruar, 2007, Choi et al., 2007). However, due to the uniqueness of each sector, the concept is still undergoing continuous enhancement. This paper strives to better capture the concept of social marketing and how it can influence quality in the delivery of healthcare facilities management (FM) by bringing in additional factors that are applied to better drive home the point.

The aim of this study therefore is to develop a framework that incorporates the social marketing concept into healthcare FM in order to improve patients’ welfare in particular and that of the society in general.

The most commonly quoted definition of FM is that of the International Facility Management Association (IFMA) which stated that FM is “a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, places, processes and technology” (www.ifma.org; Atkins & Brooks, 2009). The BIFM (British Institute of Facilities Managers) has formally adopted the European Committee for Standardization (CEN) definition of Facilities Management which now forms part of a new standard International Standards Organisation – ISO 41011:2017 Facilities Management vocabulary, published by the organisation in April 2017. It defines Facilities Management as “the organisational function which integrates people, place and process within the built environment with the purpose of improving the quality of the core business”. This implies that in a healthcare setting, FM is supposed to aid core healthcare delivery in order to meet patient satisfaction which will lead to patient loyalty.
The traditional approach of dealing with healthcare Facilities Management (FM) matters seems to be inadequate in bringing about quality in healthcare FM delivery, as it does not take into account processes that will assist patients in making their healthcare delivery choices. Thus, there is the need to come up with new strategies to help increase the efficiency of healthcare delivery, by facilitating higher levels of public acceptance and engagement in healthcare activities. The multifaceted nature of the facilities management (FM) of healthcare facilities has led to the need to incorporate vibrant concepts such as social marketing into healthcare FM delivery to help enhance performance, maintain environment quality and ensure the well-being of the patient as well as patient satisfaction.

Like most developing countries, many hospitals in Ghana are faced with challenges in the area of healthcare FM service quality which has led to patient dissatisfaction with healthcare delivery. There are about 2,262 public and private healthcare facilities in Ghana, of which 1,108 facilities are government owned. These include 10 regional hospitals, 75 district hospitals and 622 health centres (Ghana Health Service, 2007, 2014). Over the years, most studies on public hospitals conclusively indicate that the healthcare service quality in Ghana does not measure up to the expectation of patients and healthcare providers (Atinga et al, 2011; Ghana Health Service, 2003; MoH, 2007a, MoH, 2007b).

Notwithstanding the significance of addressing patients attitudinal-behavior gap, traditional policy planning in the healthcare sector has not been able to explain the intricate psychological process that assist patients to make their healthcare FM choices. Patients still seem to be inert because they lack the drive to change their conduct which results in healthcare FM policy ineffectiveness. Thus innovative methods are necessary to bring about patients social behavior transformation in an effective manner.

Incorporating social marketing into healthcare FM will afford comparism that leads to the adoption of the best practice in hospitals to aid in improvement of FM services. It will help bring out the best competitive spirit and novelty. To achieve this, “healthcare facilities must set goals based on both user standards and hospital standards to ensure user satisfaction” (Wauters, 2005; Alexander et al., 2004; Bandy, 2002). On the part of the healthcare facilities, strategies that can be used to increase their social marketing advantage in order to advance their services include approaches that influence the voluntary behaviour of target patients to improve their personal welfare and that of the society of which they are a part.

**A Proposed Framework for Incorporate Social Marketing into Healthcare FM**

The concept of social marketing was first put forward by Wiebe in 1951. He believed that approaches employed in commercial marketing can effectively be applied in the non-profit sector for the advancement of public goods and services. Kotler and Zaltman (1971) developed this idea further into a separate discipline in the early 1970s. According to Kotler and Zaltman (1971) social marketing is “the design, implementation and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution and marketing research.” In the late
1980s, Kotler and Roberto (1989) also defined social marketing as “a program planning process that promotes the voluntary behavior of target audiences by offering benefits they want, reducing barriers they are concerned about, and using persuasion to motivate their participation in program activity”.

According to Andreasen (1995), a more precise explanation of social marketing is the “adaptation of commercial technologies to programs designed to influence the voluntary behaviour of target audiences to improve their personal welfare and that of the society of which they are a part”. “The aim of social marketing is to motivate people to adapt socially beneficial behaviours. Thus, service backed by the social marketing promotion should be embedded in values, be well-understood by the public and trustworthy” (Yoon et al., 2008). Akinsanya and Bach (2014) opined that social marketing has a reasonable chance to achieve the great prospect of doing "social good".

Social marketing approach has the vital features that are deficient in traditional policy planning. It is essential for the program success as it account for the behavior change factors to improve personal welfare of customers and that of the society of which they are a part. These include customer orientation, mutually beneficial exchange, relationship thinking and utilization of the behavior change tools (Olga, 2009).

Customer Orientation
To rightly determine the needs and wants of customers to come up with the right market segmentation, there is the need to have client stakeholders meeting to determine clients “personalities, attitudes, previous actions, their income, community and culture/s (Ampt, 2003).

Mutually Beneficial Exchange
Although social marketing sometimes requires people to behave in a way which may be good for them in the long run, this is sometimes in conflict with what they are used to or what they want. People act based on their self-interests. Therefore, to engage the public in behavior change, policy planners need to offer something beneficial. There is a greater probability that different market segmentation groups will find it attractive for themselves to act in the manner desired by policy-makers if more alternatives are provided; thus, encouraging more participation in the program (Rothschild 1999).

Relationship Thinking
The nature of human relationships, the importance of networks and customer value are ideas and practices that have influenced the marketing discipline (Hastings 2003). Thus, relationship building has moved from between businesses to include customers. Relationship thinking has significantly influenced social marketing. Therefore, the focus is now on customer retention and loyalty (Hastings 2003).
**Behaviour Change Tools**

According to Olga (2009) communication methods used to attract potential customer’s attention to new ideas include:

i. Written or verbal commitments to act as prompts or visual reminders to customers to help them change.

ii. The desired behaviour can be advocated for by letting customers aware of the benefits derived by a group of people who have implemented it successfully in another environment.

iii. Incentives (monetary or non-monetary) that encourages people to make a change.

iv. However, Olga (2009) indicate that there is the need to clearly define the weakness and strengths of social marketing and determine where and when it is appropriate to apply it so as not to misapply its basic tenets.

The question therefore is how can social marketing concept be incorporated into healthcare FM?

Figure 1, shows the proposed steps that can be implemented to incorporate social marketing into healthcare FM. The steps were adapted from the works of McKenzie-Mohr (1999), Rothschild (1999) and Olga (2009). Their studies were in the application of social marketing in promoting public health and social issues behaviours, fostering sustainable behaviour, and sustainable transportation respectively. The steps were modified to suit the current study.
**Figure 1: Steps to Incorporate Social Marketing into Healthcare FM (Authors construct)**

**STEP 1**
*Problem definition:* within the context of how the healthcare FM problem is perceived by patients

**STEP 2**
*Target audience identification:* application of market segmentation technique to identify patients who are already interested in healthcare FM changes in order to distinguish between demands of different patients

**STEP 3**
*Hindrances and benefits identification:* allows considering the obstacles and drivers for the desired change existing in the healthcare

**STEP 4**
*Different exchange options formulation:* These are alternatives to the current behavior of patients

**STEP 5**
*Behavior change tools identification:* This include norms, communication, prompts, commitments and incentives

**STEP 6**
*Policy implementation:* Every new healthcare FM policy should be piloted using a small group of the patients so that shortcomings identified can be addressed at the early stages before it is implemented on a larger scale.

**STEP 7**
*Monitoring and evaluation:* After the wide scale implementation of the healthcare FM program, there is the need for constant monitoring to ensure it is working as planned.

**STEP 8**
*Policy redesign:* Based on the monitoring and evaluation, where necessary, the healthcare FM strategy can be adjusted based on changing circumstances in patients preferences.

**STEP 9**
*Stakeholder involvement:* All of the preceding steps should be performed based on all healthcare FM stakeholders' involvement
The main concept behind the framework is to provide patients with alternative solutions to problems identified in healthcare FM delivery for them to decide which one best suit their demands. This can be achieved by creating a good service provider-customers relationship by involving all healthcare stakeholders in the identified steps of the healthcare FM program planning identified in Figure 1, so that the policy or strategy used can be adjusted to patients’ needs and concerns. Because of the need for fairness, all stakeholders are made to decide for themselves when and how the agreed upon strategies and policies can be implemented. Because of cost savings and the need to assess behavioural responses of patients to the policy measures, there is the need to pilot the program before actual implementation of the program.

To make the program sustainable, there should be patient’s orientation programs to determine patient’s values and beliefs to come up with the different patient segmentation. Through the mutually beneficial exchange, factors of perceived behavior control and qualities of the environmental behaviour can be addressed. The behavior change tools component will help address the need for appropriate information, effective reminders, potentials and incentives for patients to be more environmentally conscious. However, with proper monitoring at the piloting stage, impact of practical behavior on policy implementation can be determined before wide scale launching of the program. If the results are undesirable then there is the need to assess the program and make the necessary changes. There should be a continuous cycle of planning, implementing, assessing and improving of the framework to ensure that it meet the required set goal.

Social marketing like other marketing discipline is reliant on criticism or views about customer needs and customer perception of an organization with the sole aim of achieving customer satisfaction and loyalty. In theory, this study will contribute to knowledge by adding to literature on how the concept of social marketing can be incorporated into healthcare FM. The study would enrich knowledge. In practice, this study will benefit three key stakeholders. These are the staff and workers, the FM team and the patients/users of health facility. The FM team will be able to plan their services prudently to preserve their reputation. Staff and workers on the other hand will benefit when they are able to work in a well-managed health facility. Moreover, the patients will also benefit because even though good patient care comes from dedicated individuals, it is equally true that the physical structures and hospital environment must be such that the safety and well-being of patients are also protected.

**Conclusion**

Application of the social marketing concept in healthcare delivery is challenging due to the problem of being able to meet the expectation of all the patients. However, with staff preparedness to meet the challenges head-on by delivering quality service, based on the readiness to implement patient’s suggestions, the concept of social marketing can be implemented in healthcare FM to ensure quality service delivery to meet patients’ needs.
and ensure patient loyalty.

In order to effectively incorporate the concept of social marketing into healthcare FM, it is important that Facilities Managers are involved in decision making at the highest level at the hospitals in order for them to feel a part of the hospital development both present and in the future. Unfortunately, this is not so in Ghana where Facilities Managers only come in at the management phase but not at the inception of projects and programmes. Thus, their views on pertinent issues that directly or indirectly impact on their operations are not sought in certain critical matters and at the phase when social marketing and quality FM service could have been easily incorporated. Therefore, to ensure the success in the quality of FM delivery, it is imperative that the Facility Managers are roped into the strategic decision making process.


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Mental Health, Alcohol and Other Drugs: After Hours Crisis Communication and Marketing Initiative

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Project/Issue Overview
Communities living within the Murrumbidgee area of NSW identified issues with mental health, alcohol and other drugs as being a specific concern for the region. In response to the detailed needs assessment completed in 2016, the Murrumbidgee Mental Health Drug and Alcohol Alliance (MMHDAA) together with the Murrumbidgee Primary Health Network (MPHN) initiated the development of a marketing and communications initiative to improve access to information at the time of a mental health crisis. A high-profile, integrated marketing campaign was launched in late 2017, and incorporated the elements that equipped all stakeholders to actively support long term increases in help-seeking behaviour. The marketing and communications program is part of a wider set of comprehensive regional initiatives aimed at addressing these identified needs.

Background and social context
The Murrumbidgee Mental Health Drug and Alcohol Alliance brings together key stakeholders from the health, community and social sectors across the Murrumbidgee. Together with the MPHN, members identified that there was no strategy or marketing collateral used consistently across MMHDAA organisations, nor in the broader mental health sector.

1 Originally an Occupational Therapist, Carolyn Loton has worked as a marketing specialist for over 20 years. In 2006 she founded Juntos Marketing, a full service marketing agency whose focus is to use marketing for good, working across health, health promotion, aged care, professional services and industry. The business now also incorporates Leapfrog Research. Carolyn has a passion for communicating positive health and ageing messages more effectively. She strongly believes in the power of strategy, insights, creativity and professionalism as the foundations of marketing that deliver long term value. She holds a Master of Business Administration from Edinburgh University, as well as a Diploma in Marketing and Bachelor of Applied Science (Occupational Therapy).
They identified the importance of ensuring consumers and carers have access to information at the point of crisis – particularly crises that arise outside of normal business hours.

Key considerations in the development of the approach included the importance of reducing stigma associated with seeking help for mental health, drug and alcohol concerns, the need to appeal to specific high risk target sub-groups while maintaining a clear overall message, look and feel, and the need to be culturally appropriate and respectful of all members of the community.

**Behavioural/Social Change Goals**

The aim of this project was to encourage greater help seeking behaviour among people experiencing a mental health, alcohol or other drug crisis within the Murrumbidgee area of NSW, Australia. Given that many crises occur out of usual business and service hours, the primary objective targeted help seeking behaviour after hours – during evenings, weekends and public holidays, directing those in crisis to identified, location-specific pathways.

Specifically, the goals of the project were:

- To increase awareness of AccessLine in the Murrumbidgee area (local triage service specifically catering to those with mental health, drug and alcohol concerns)
- To increase awareness of other emergency or mental health support services (LifeLine, 000 and [www.headtohealth.com.au](http://www.headtohealth.com.au))
- To reduce the stigma around mental health among the general community in the Murrumbidgee area
- To increase community engagement and awareness of the need to reach out and seek support at a time of crisis

**Citizen orientation**

The development of this program involved community consultation, qualitative and quantitative research at multiple stages. During the needs assessment stage, foundational research included community consultations held with key stakeholder groups across the region. This was supplemented by an online survey of community members in the region (n=799) (MPHN Needs Assessment, 2016).

In planning for the communication elements, a series of focus groups and in depth interviews were conducted across key identified target groups including high risk sub-groups, in order to explore and confirm the most relevant mechanisms for communication. At this stage, an important component of the groups and interviews was to incorporate community input in the co-design of key program elements.
A consumer advisory panel was used to further quantify specific aspects of the program. In addition, the design and development at all stages of the program was informed by over 20 MMHDAA community groups who provide a range of mental health, drug and alcohol services in the Murrumbidgee area.

**Research and Insight**

1) **Issues relating to mental health, alcohol and use of other drugs is a significant issue in the Murrumbidgee area.** One in five (20%) Australians aged 16-85 experience a mental illness in any year. The most common mental illnesses are depressive, anxiety and substance use disorder (ABS, 2009). In many Local Government Areas within the Murrumbidgee area, levels of self-harm and alcohol use requiring hospitalisation are significantly higher than the national and NSW state averages (MPHN Needs Assessment, 2016). The reasons behind this trend are many and complex. The MPHN Needs Assessment identified drought and climatic events as having significant geographic and economic impacts on the region’s people, including “dislocation as people search for work...social and community fragmentation and hardship particularly in rural communities. The impact on Indigenous communities is particularly severe”. The Murrumbidgee health needs assessment identified the region as having a higher proportion of low income families, a significantly higher proportion of Aboriginal and Torres Strait Islanders and higher smoking rates in pregnancy and early parenthood when compared to state and national averages. Additionally, the report highlights access to subsidised mental health related services as lower than state and national averages. Other factors contributing to the region’s challenges include a limited range of mental health services across the region particularly for those seeking treatment for alcohol and other drug addictions (particularly outside Wagga Wagga), the need for many to travel long distances in order to access appropriate services and insufficiently sized mental health workforce in the region.

2) **At a time of crisis, people in the Murrumbidgee area can find it difficult to know where and how to seek support, especially in the after-hours period.** People with lived experience, their families, carers, and communities in the Murrumbidgee area consistently reported that information about service options is lacking, confusing, or not readily available (MPHN Needs Assessment, 2016). Mental health service providers in the area have worked hard together to improve access to services. These initiatives include the growth of the MMHDAA as a collaborative organisation and the focus on the Murrumbidgee Accessline as a central triage and phone support service. Qualitative research conducted in August and September 2017 indicated that during a time of imminent crisis, it is often difficult for the person themselves to reach out, therefore carers and loved ones were also an important target consideration.
3) Stigma is a barrier to seeking support (Australian Senate Report 2010). The community survey conducted in March 2016 (n=799) found that key community concerns included the need for education to reduce stigma and the need to increase support via both awareness of services and accessibility (MPHN Needs Assessment, 2016). This was confirmed in community stakeholder interviews, in which mental health professionals indicated that “the level of shame experienced by the individual often leads to self-loathing, very secretive behaviour and reluctance to seek help” (MPHN Needs Assessment, 2016).

4) Any campaigns and initiatives need to combine consideration of identified high risk groups with the community at large 54% of people with mental illness do not access any treatment (AIHW, 2014). In a significant proportion of crises that occur, the individual is not known to any service providers. In some populations, up to three quarters of all people who end their lives are not in contact with mental health services (Hewlett and Horner, 2015). In other words, a mental health, alcohol or drug crisis can happen to anyone. Segmentation. The program was tailored to meet the needs of a number of specific target groups, within the context of the wider Murrumbidgee community. Specific high risk groups were identified within the total population, including young people, those from an indigenous background, those from culturally and linguistically diverse backgrounds, and those from the LGBTIQ community (MPHN Needs Assessment, 2016). Rural, isolated males were also identified as a group at high risk of suicide or attempted suicide (MPHN Needs Assessment, 2016). Specific geographical areas within the Murrumbidgee area have a higher than average suicide rate (MPHN Needs Assessment, 2016). Given the prevalence of suicide, self-harm and mental health crises among people who are previously undiagnosed, the initiative needed to have broad community appeal. The campaign materials and media strategy were therefore developed with both the broad community and specific high-risk groups in mind. Choice of language was essential to ensure non-stigmatisation, and the process to develop the choice of language included consultation with health professionals, mental health experts and a wide variety of community members and stakeholders (including those with lived experience).

Value
Addressing and combatting suicide, mental health, drug and alcohol issues is a complex challenge. Seeking help at a time of crisis is associated with improved long term health outcomes and improved quality of life measures (Department of Health and Ageing, 2013).

Given appropriate mental health care and services, most people experiencing a crisis are able to recover well and return a productive and satisfying life. Therefore by increasing the number of people living in the Murrumbidgee area who seek help at a time of crisis, it is expected that there will be a long term community and economic benefit.
Competition
Suicide, mental health, drug and alcohol issues are conditions with deep seeded complexity. While the incidence of depression, anxiety, mental health, drug and alcohol issues is high (ABS 2009), the associated stigma can make it difficult to ask for help or admit having a problem. (Australian Senate Report, 2010)

The ‘competition’ for the behaviour change targeted by this program could be seen as:

- Complacency – doing nothing (and potentially living with high levels of stress, long term untreated mental health concerns and/or substance use or abuse, reduced quality of life and reduced productivity)
- Taking drastic action – including self-harm or attempting suicide

Theory
Prochaska and DiClemente’s transtheoretical model of the stages of change (1986) suggests that there are six stages of behaviour change: pre-contemplation, contemplation, preparation, action, maintenance, and termination. Applying the transtheoretical model of change, this initiative focused on the stages of contemplation, preparation and action. Flay and Cook (1989) suggest that social marketing campaigns are generally most effective in initially creating awareness, modifying and influencing perceptions by providing motivations to change attitudes. The authors suggest that as attitudes change, propensity to make behaviour change increases. For this reason, in evaluating the program effectiveness, the following were initiative objectives:

- Awareness of the AccessLine in the Murrumbidgee
- Awareness of other sources of support, specifically LifeLine, 000 in an emergency, www.headtohealth.com.au and local general practitioners
- Propensity to seek help (for oneself or a loved one)
- Increases in intended help-seeking behaviour

Social Marketing Intervention Mix
This initiative and campaign used a combination of television, radio, social media and print to build awareness and to encourage help-seeking behaviour among the target groups.
It was supported in a wider context by a range of other initiatives undertaken by the MPHN and the MMHDAA. These included a stepped care approach to access to mental health services, drug and alcohol services tailored to the most vulnerable groups within the community and primary and secondary suicide prevention strategies.

Policy change and advocacy around mental health service provision continues in the wider, state and federal context.

**Partnerships**

- Murrumbidgee Primary Health Network
- The Murrumbidgee Mental Health Drug and Alcohol Alliance and their individual members Community groups

**Evaluation and results**

The following measures were used to evaluate the program:

- Pre and Post campaign awareness across the Murrumbidgee region (omnibus survey)
- Achievement of social media, television and radio campaign objectives
- Reported impact by MMHDDA members (social impact)
Following are the quantitative results from the pre and post campaign evaluation:

<table>
<thead>
<tr>
<th></th>
<th>Date (pre-program) N= 76</th>
<th>Date (at week 8 of program) N= 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of phone services available in the Murrumbidgee (for support with drug, alcohol or mental health concerns)</td>
<td>22.4%</td>
<td>37.3%</td>
</tr>
<tr>
<td>Unprompted awareness of AccessLine</td>
<td>3.9%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Prompted awareness AccessLine</td>
<td>35.5%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Unprompted awareness of any other relevant services</td>
<td>18.4%</td>
<td>29.3%</td>
</tr>
<tr>
<td>Unprompted awareness of LifeLine</td>
<td>79.0%</td>
<td>81.0%</td>
</tr>
</tbody>
</table>

Source: iLink telephone survey, conducted in the Murrumbidgee (9-13th December 2017 and 6 – 11th February 2018 respectively)

The limitations of these results should be noted, in particular the small sample size. Social media achieved the following results:

<table>
<thead>
<tr>
<th>Total Impressions</th>
<th>1,144,741</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average reach per post</td>
<td>42,000 – 94,000</td>
</tr>
<tr>
<td>Video views – TVC in full</td>
<td>12,930</td>
</tr>
<tr>
<td>Video views – TVC partial views</td>
<td>52,800</td>
</tr>
<tr>
<td>Post reactions – likes, shares etc</td>
<td>745</td>
</tr>
</tbody>
</table>

**Lessons Learned**

Engaging community and stakeholders regularly throughout program planning and execution ensured wide support and maximised impact.

Multiple media channels were effective in ensuring as wide a reach as possible.

Social media, and in particular Facebook and Instagram, played a significant role in the campaign’s success. This medium was highly effective in supporting and extending the
awareness and messaging achieved using television and radio across a range of age groups, with a skew towards younger ages.

Timing of the campaign was of great significance. The primary focus of the campaign was to be in field in the lead up to and during the Christmas – New Year period, as this is a peak time of crisis.


References


PAPER: 41 TITLE: Mental Health, Alcohol and Other Drugs: After Hours Crisis Communication and Marketing Initiative


Conference Proceedings: Day 2

**Keynote Speaker: Marieke Bink**  
**CEO, Cycling without Age, Singapore**

Marieke Bink is the Chief Executive Officer of Cycling without Age Singapore, a movement started in Denmark in 2012 by Ole Kassow. In October 2015, Singapore became the first country outside of Europe to have the Cycling without Age movement. Marieke has been driving the rapid growth of Cycling without Age Singapore, the most notable programme to date being a partnership with Temasek Foundation Cares for an intergenerational bonding project. Moving Generations connects youth with seniors by taking them out on e-trishaw rides and while sharing stories.

**Keynote Speaker: Choong Weng Wai**  
**Associate Professor, Universiti Teknology Malaysia**

Dr. Choong Weng Wai is an Associate Professor at Universiti Teknologi Malaysia. He is the recipient of Excellence Award for Contribution towards Sustainability from the Royal Institution of Surveyor Malaysia (RISM) and a visiting scholar in the MIT-UTM Malaysia Sustainable Cities Program. He specialises in pro-environmental behaviour, consumer behaviour and marketing research. His research activities are focused on measuring environmental awareness and environmental behaviour.

**Special Session: Synthesizing Benchmarks and Planning Steps**  
**Sharyn Rundle-Thiele**

Commercial marketing is centered on the consumer and is focused on delivering a competitive value offering that is superior in some way to the competition. Marketers seek to understand their target audience and their competitors before creating an offering to meet the target market’s needs and wants. In 2002 Alan Andreasen outlined 6 key social marketing benchmarks stating that when 1 or more are used it is social marketing. Fast forward to 2018 and we know that change is more likely when more social marketing benchmarks are used. This workshop outlines the process and planning steps used by Social Marketing @ Griffith to deliver behavioural change.
Macro-social marketing is the application of marketing for behaviour change at the up, mid and downstream levels in a co-ordinated effort to make systemic change. This is especially appropriate for wicked problems such as obesity, tobacco use, and environmental degradation. Such wicked problems have multiple intersecting causal factors perpetuating the issue and involve multiple stakeholders. It is exceedingly complicated to define the problems let alone identify which causes to intervene with and the best way to go about it. The complexity of all factors further means that there are myriad unintended consequences of intervening. This special session provides an insightful discussion of the varying views on macro level social marketing and systemic change from differing stakeholders. This, at times, controversial topic will be explored considering its positive and negative sides and the practical issues with its implementation.
Paper Sessions: Day 2

Paper Session: Health and Wellbeing

Session Chair:

Lucy Nyundo
The family tension that is Type 1 diabetes

Rachel Peile, Mike Reid & Lisa Farrell

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¹ Rachel Peile has completed her second year of her PhD candidature in social marketing at RMIT University. Her topic is examining family identity in the face of chronic illness, utilising type 1 diabetes as a case study. Her research is examining the impacts of the condition to families from both the health care practitioner perspective and the family experience. Prior to pursuing her PhD, she spent over 20 years in service marketing in the airline, directories and education sectors. In 2016, Rachel was awarded the Tony Naughton Memorial PhD Scholarship. Her supervisors are Professors Mike Reid and Lisa Farrell.

² Professor Mike Reid is the head of the Marketing Discipline and deputy head of the School of Economics, Finance and Marketing. Mike has industry and academic experience in qualitative (focus groups, interviewing, online communities, case study) and quantitative (survey) research and has held a number of competitive grants including ARC Discovery, Sustainability CRC, VicHealth Innovation, VicHealth Partnership, and a National Health and Medical Research Council grant. Mike’s research encompasses consumer lifestyles and behaviour change and he has expertise in the area of social marketing. Mike has extensively published in quality peer reviewed journals. Mike has presented research in many different forums including public, industry, and academic environments. Mike is the co-convener of the 2017 Australia and New Zealand Marketing Academy conference.

³ Professor Lisa Farrell is a Health Economist and the head of the Economics Discipline at RMIT. She studies risky health behaviours and behavioural economics. Lisa’s work focuses on healthy behaviours at the family and individual level. She has studied aspects of child health and economic welfare issues like childhood consumption and the impact of welfare systems on incentives for young adults to drop out of school. Lisa has published in leading international economic journals.
Introduction
The diagnosis of type 1 diabetes is like opening Pandora’s Box – the diagnosis can come as a relief to some families who have a critically ill child, however, the diagnosis can turn out to have detrimental and far-reaching negative consequences for the individual and the family.

Type 1 diabetes is an interesting topic for social marketers and society because it is a complex and demanding condition that places a substantial burden on young people and their families. It is one of the most common chronic childhood conditions and the diagnosis rate is increasing worldwide (Cameron & Wherrett, 2015).

The International Diabetes Federation (IDF, 2015) estimates there are 542,000 children between 0-14 years with type 1 diabetes in the world. Europe has the most with 28% followed by North America and Caribbean at 21% and South East Asia at 16%. Type 1 diabetes imposes enormous public health costs and significantly impacts the individual with the condition and their family’s quality of life. This non-preventive health condition is examined to reveal the tensions families live with and the social marketing implications.

The aim of this study is to investigate the tensions families experience when a child is diagnosed with Type 1 diabetes and the impact to their family identity as a result of the diagnosis and living with the disease. The research also aims to identify social marketing interventions for families. This study is being conducted in two stages; initially with health care practitioners who are able to provide an overview of families’ experiences, and second, with families to validate themes and capture their narratives. This paper presents the first stage of findings. The main research questions are focused on what tensions arise for families and need to be managed after the diagnosis of a child with type 1 diabetes?

This study is framed through the lens of family identity because type 1 diabetes is an autoimmune condition and is not linked to modifiable lifestyle factors. There is no cure and it cannot be prevented (Atkinson, Eisenbarth, & Michels, 2013). Family identity is important for the wellbeing of the family. “Our families provide the glue that connects the parts of our lives for better and for worse” (Olson, Baiocchi-Wagner, Kratzer, & Symonds LeBlanc, 2012, p. 1). Social marketing needs to focus on the family and not just the individual to develop an environment in which the impact of the condition on the individual and other family members is minimised and the family supported and helped to live well. In particular, we need to understand the tensions family face on a daily basis to devise practical social marketing interventions.

Through focusing on family identity principles and behaviour, the family can unite against the tensions faced by the condition and individuals can develop without being overwhelmed by the condition and its’ impact on the family. Family identity is each family’s subjective sense of its own continuity over time, its present situation and its unique character. It is the aggregate of qualities that differentiates it from others (Bennett, Wolin, & McAvity, 1988; Bolea, 2000; Epp & Price, 2008). It shapes how we interact, “family decision making,
Social marketing seeks to influence people’s life styles and their behaviour, as well as, promote government policy for the greater good through both upstream and downstream approaches by using marketing principles, tactics and strategies (Brennan, Binney, Parker, Aleti, & Nguyen, 2014). Little has been published offering social marketing interventions focused on family identity when living with chronic conditions including type 1 diabetes.

**Method**

Semi-structured interviews were conducted with practitioners to understand their perspective on the tensions faced by families living with type 1 diabetes (Denzin & Lincoln, 2011). Practitioners deal with families across a broad spectrum of type 1 diabetes stages. The interviews focused primarily on the tensions that families experience living with type 1 diabetes, behaviour change suggestions and policy interventions to support families. A cross section of practitioners from type 1 diabetes medical specialists and allied health specialists across seven hospitals, advocacy bodies and government representatives were interviewed in Victoria, Australia. Practitioners were interviewed at their workplace with informed consent. No incentives were offered and participation was entirely voluntary. Bias was reduced through the substantial number of interviews and triangulation of the data across different roles. Twenty-four interviews were conducted between December 2016 to August 2017 when theoretical saturation was reached with no new data or themes emerged from the interviews (Quinlan, 2011). The interviews were audio recorded and professionally transcribed. The transcripts were coded using thematic analysis (Quinlan, 2011; Silverman, 2013) by the first author and reviewed and discussed at research meetings to consolidate and validate key themes.

**Results**

Health practitioners identified an exhaustive list of tensions families faced. These tensions were analysed and developed into three overarching tension themes; the emotional struggle, limited resources, and the stigma of type 1 diabetes. We will discuss each tension theme.

The emotional struggle felt by families at diagnosis include; anger, anxiety, confusion, fear, grief, guilt, responsibility, hope, overwhelmed, relentlessness of the tasks required managing the condition and exhaustion from the increased roles. Whittemore, Jaser, Chao, Jang, and Grey (2012) found approximately one-third of parents reported severe emotional distress at the time their child was diagnosed, and 20% reported high levels of emotional distress 1–4 years after diagnosis. Many parents check their child’s blood glucose levels several times during the night and experience high levels of emotional stress.
One medical specialist commented:

“A lot of those teenagers, they come in with their parents, mainly their mothers, and those mothers had never slept a full night in their life. They’ve woken up two or three times to check the kids overnight to make sure their blood glucose levels weren’t getting up.”

Another medical specialist reflected on the intensity of emotion around diagnosis:

“Even ten years later, you can ask parents about the diagnosis and they can tell you the exact date. They know exactly when it happened. They’ll tell you the date, 3 October 1995, because it’s such an important event for them”.

The second theme of limited resources encompassed tensions such as time demands required to manage the condition and attend appointments, the pressure to have the most up to date diabetes technology, resource issues at school, the insufficient assistance for mental health support, and the financial strain on the family which impacts all family members.

One medical specialist reflected:

“There’s a demand put on the child and the family... one is just the actual time of doing the blood tests and thinking about what they’re going to eat, give insulin and record it.”

One patient advocate commented:

“You’ve got families juggling, and I’ve had quite a few more instances of families having a great deal of tension about finance... people who couldn’t afford their insulin because they’d just diagnosed with another health condition and they were trying to work out how to juggle it and they hadn't budgeted for the costs of two health conditions.”

The third tension theme centred on the stigma associated with living with type 1 diabetes. Practitioners shared stories of children experiencing bullying and being haunted by rumours in the school yard about having to inject insulin. One diabetes educator shared the incident about a youth injecting insulin in a fast food restaurant and another patron calling the police as they had assumed they were taking illicit drugs. A point of contention is the media’s confusion of type 1 diabetes and type 2 diabetes.

One patient advocate commented:

“There is very much a stigma attached to these children... Oh you've got diabetes because you're fat. You've got diabetes because your mum feeds you too much sugar. That's a lot on top of the diagnosis for a young child to process that they are being judged for an autoimmune condition that they did not cause.”
Practitioners highlighted that encourage families to be organised, have a positive mindset and develop strong routines and habits to support the type 1 diabetes care requirements. The examination of practitioners views and insights suggested that successful families understood that living with type 1 diabetes was a journey with “different stages and ages” and don’t allow the condition to limit their lives nor let it define them as a family. This is often easier said than done and some practitioners admitted that they didn’t ask about mental health issues as they didn’t know how to help.

One diabetes educator highlighted

“Diabetes is serious. It’s a lifelong thing. When not cared for, then you’re opening up Pandora’s box.”

**Discussion and conclusion**

This paper offers a unique discussion of a non-preventable childhood chronic disease and the impact it has on families from the practitioners’ perspective. Health practitioners offer a unique view of family impacts and provide an important part of our understanding. Our findings highlighted three key tension themes; emotional struggle, limited resources and the stigma associated with the condition. These themes provide a basis on which to consider and devise interventions and strategies to support families.

To combat the emotional struggle, practitioners and support communities should focus on family events that foster opportunities for families connect with other families and share stories to normalise the condition and support one another. This is especially important for families with a new diagnosis who often struggle to see a pathway forward and families going through the teenage struggle. Interventions focused on helping individual family members and the collective are important. It’s a whole family condition, so it’s important to include brothers, sisters and the parents. Families need to integrate type 1 diabetes into their family identity to improve the levels of care and help them live well.

To address limited resources, increased lobbying for change to government policy focused on reducing the cost of medicines and increase management options such as funding continuous glucose monitors for all people living with type 1 diabetes. This includes extending the financial support given to families over the age of 16 years.

Finally, the stigma associated with type 1 diabetes, needs to be addressed by increasing public awareness of the condition and the struggles families’ experience. Type 1 diabetes is the most common chronic condition in childhood however it does not receive the media attention nor public support of other childhood conditions. It is important to acknowledgment the struggles families live with at the different ages and stages to reduce the stigma families’ experience. The next stage of research is to interview families to validate these findings and devise practical social marketing interventions.

References


### Appendix: Perceptions of barriers to students’ moderate drinking as a function of country.

<table>
<thead>
<tr>
<th>Factor</th>
<th>New Zealand (n = 226)</th>
<th>Vietnam (n = 277)</th>
<th>Chi-square (df = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENVIRONMENTAL FACTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drinking culture</td>
<td>32 45.6%</td>
<td>9 3.2%</td>
<td>19.79 ***</td>
</tr>
<tr>
<td>Living environment</td>
<td>21 9.3%</td>
<td>7 2.5%</td>
<td>10.84 **</td>
</tr>
<tr>
<td>Personal circumstances</td>
<td>3 1.3%</td>
<td>24 8.7%</td>
<td>13.19 ***</td>
</tr>
<tr>
<td>Working environment</td>
<td>0 0.0%</td>
<td>34 12.3%</td>
<td>29.75 ***</td>
</tr>
<tr>
<td>Public events</td>
<td>1 0.4%</td>
<td>14 5.1%</td>
<td>9.15 **</td>
</tr>
<tr>
<td>Personal events</td>
<td>31 13.7%</td>
<td>55 19.9%</td>
<td>3.31 ns</td>
</tr>
<tr>
<td>Socialising activities</td>
<td>40 17.7%</td>
<td>59 21.3%</td>
<td>1.02 ns</td>
</tr>
<tr>
<td><strong>INTER-PERSONAL FACTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer pressure</td>
<td>120 53.1%</td>
<td>159 57.4%</td>
<td>0.93 ns</td>
</tr>
<tr>
<td>Social pressure</td>
<td>16 7.1%</td>
<td>16 5.8%</td>
<td>0.35 ns</td>
</tr>
<tr>
<td>Peer norm</td>
<td>53 23.5%</td>
<td>35 12.6%</td>
<td>10.09 **</td>
</tr>
<tr>
<td>Social norm</td>
<td>31 13.7%</td>
<td>5 1.8%</td>
<td>26.58 ***</td>
</tr>
<tr>
<td>Fear of missing out</td>
<td>81 35.8%</td>
<td>1 0.4%</td>
<td>114.82 ***</td>
</tr>
<tr>
<td>Identity</td>
<td>29 12.8%</td>
<td>46 16.6%</td>
<td>1.40 ns</td>
</tr>
<tr>
<td><strong>INTRA-PERSONAL FACTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive attitude to drinking</td>
<td>76 33.6%</td>
<td>54 19.5%</td>
<td>12.97 ***</td>
</tr>
<tr>
<td>Low negative expectancy</td>
<td>34 15.0%</td>
<td>4 1.4%</td>
<td>32.96 ***</td>
</tr>
<tr>
<td>Amotivation</td>
<td>25 11.1%</td>
<td>13 4.7%</td>
<td>7.23 **</td>
</tr>
<tr>
<td>Boredom</td>
<td>17 7.5%</td>
<td>3 1.1%</td>
<td>13.52 ***</td>
</tr>
<tr>
<td>Feelings</td>
<td>33 14.6%</td>
<td>80 28.9%</td>
<td>14.57 ***</td>
</tr>
<tr>
<td>Habit</td>
<td>23 10.2%</td>
<td>49 17.7%</td>
<td>5.73 *</td>
</tr>
<tr>
<td>Low self-control</td>
<td>32 14.2%</td>
<td>84 30.3%</td>
<td>18.33 ***</td>
</tr>
<tr>
<td>Addiction</td>
<td>20 8.8%</td>
<td>58 20.9%</td>
<td>13.88 ***</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01; *** p < 0.001; ns: p >= 0.05
Comparing (user profiles) of apples with apples

Zachary Anesbury, Danielle Talbot, Tim Bogomolov, Chanel Day & Svetlana Bogomolova

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1 Zachary Anesbury is a Senior Researcher at the Ehrenberg-Bass Institute for Marketing Science at the University of South Australia Business School. The Institute is sponsored by many leading corporations including Procter & Gamble, Mondelez, Unilever, Kantar, and Colgate-Palmolive. In 2018, Zachary became the inaugural Professor Gerald Goodhardt Postdoctoral Research Fellow. Zachary’s current research area focuses on consumer buying patterns of fresh produce. Zachary’s research has been published in the European Journal of Marketing, Marketing Letters, the Journal of Advertising Research and the Journal of Retailing and Consumer Services.

2 Danielle Talbot is a Research Assistant at the Ehrenberg-Bass Institute for Marketing Science at the University of South Australia Business School. Danielle’s main areas of research interest are consumer behaviour and social marketing.

3 Dr Tim Bogomolov is a Lecturer in Statistics at the University of South Australia and a Research Associate at Flinders University School of Mathematics and Statistics. He specializes in big data and data mining methods. He applied his expertise to different contexts from marketing and consumer behaviour to financial markets and optimization of hospital systems. He has published in applied mathematics and business journals.

4 Dr Svetlana Bogomolova is an Associate Professor at the Ehrenberg-Bass Institute for Marketing Science at the University of South Australia Business School. She is a consumer behaviour researcher studying the influence of supermarket environment (e.g., price promotions, region of origin signage, nutrition information) on food choices. Her research informs the practice of industry partners (multi-national and local businesses and non-for-profit organizations) and government policy about protecting and promoting consumer interests. She has published in leading journals in marketing, public health and nutrition. Introduction and Background

5 Chanel is an Associate Director, Analytics at Nielsen. Chanel is Nielsen’s resident fresh expert, leading the fresh industry pillar for Nielsen in Australia. Chanel works with clients across produce, meat, seafood and deli, helping them to take advantage of trends happening within the fresh food space and develop winning strategies. She has more than 20 years’ industry experience, holding senior management positions at Perfection Fresh Australia and Carter & Spencer Group prior to joining Nielsen.
Introduction
One of the objectives of social marketing is to help influence and maintain healthful behaviors (Firestone, Rowe, Modi, & Sievers, 2017). Increasing consumption of fruits and vegetables can achieve this objective, by preventing cardiovascular diseases and cancers (Aune et al., 2017; Slavin & Lloyd, 2012), lowering the incidence of obesity (World Health Organization, 2003), and improving psychological wellbeing (Conner, Brookie, Carr, Mainvil, & Vissers, 2017). Further social and economic benefits include improving the quality of the populations’ diet (Mytton, Nnoaham, Eyles, Scarborough, & Mhurchu, 2014; World Health Organization, 2015), supporting primary production and supply-chain industries (Bianchi & Mortimer, 2015; Racine, Mumford, Laditka, & Lowe, 2013) and reducing government health expenditure (Deloitte Access Economics, 2016).

In 2017, the Australian national fruit and vegetable industry body spent approximately AUD$19 million on marketing (Hort Innovation, 2017b). Their campaigns may focus on appealing to specific market sub-segments (Hort Innovation, 2017a), often people who are fond of a particular fruit or vegetable. Similarly, owners of proprietary varieties often seek to market their products towards segments of consumers. Indeed, over sixty years ago, Smith (1956) declared that marketers should create differentiated products to satisfy small segments meeting their unique needs. However, since then, many empirical investigations have shown that competitive brand user profiles seldom differ and brands appeal to an unsegmented mass market (Anesbury, Winchester, & Kennedy, 2017; Hammond, Ehrenberg, & Goodhardt, 1996; Kennedy & Ehrenberg, 2001a, 2001b; Uncles, Kennedy, Nenycz-Thiel, Singh, & Kwok, 2012). The majority of such empirical knowledge was established in consumer- packaged goods, possibly a different type of product and decision-making than when buying fresh fruit or vegetables. Whether the same patterns of user profile differences/similarities will apply to fresh produce is unknown. Such knowledge has the potential to improve the effectiveness of social marketing activities of the national fruit and vegetable industry body, supporting their decision with rigorous scientific evidence.

Data and Method
This analysis uses the methods developed in consumer packaged goods brand user profile studies (Hammond et al., 1996; Uncles et al., 2012). This study used over 156,000 purchase transactions from 5,843 (apples) and 6,970 (tomatoes) Australian Nielsen panel households. The data covers six months for fresh apples, and three years for fresh tomatoes. Consistent with previous studies, we only analyze the largest brands (Anesbury et al., 2017; Hammond et al., 1996), and treat apple and tomato varieties as brands.

We demonstrate the analysis with the apple category for brands and household size (Table 1). We first calculate the percentage of each apple brands buyers from each segment. For example, 51% Pink Lady buyers were from households with 1-2 people (1963 divided by 3873). Next, we calculate the deviations by subtracting the average of all apple brands from...
each apple brand. Continuing, Pink Lady’s deviation for 1-2 people households is 1.1 (51 minus 50). We then average the absolute deviations to determine if the deviations are of managerial significance. The MAD of 1.5 shows that on average, apple brands are 1.5% from the average of all apple brands. The MAD <=5%, is not considered to be managerially significant (i.e., warranting further investigation) (Uncles et al., 2012).

The same analysis is then systematically undertaken for 21 variables such as region, household size and income, primary shopper age, sex and occupation, as well as pet and technology ownership, and so on.

**Table 1: User profile analysis of apples – household size (AUS, 2016)**

<table>
<thead>
<tr>
<th></th>
<th>Counts</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>1-2</td>
<td>3-4</td>
<td>5+</td>
<td>1-2</td>
<td>3-4</td>
<td>5+</td>
</tr>
<tr>
<td>Pink Lady</td>
<td>3873</td>
<td>1963</td>
<td>1444</td>
<td>466</td>
<td>51</td>
<td>37</td>
<td>12</td>
</tr>
<tr>
<td>Royal Gala</td>
<td>2596</td>
<td>1309</td>
<td>977</td>
<td>310</td>
<td>50</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Unclassified</td>
<td>2424</td>
<td>1178</td>
<td>942</td>
<td>304</td>
<td>49</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>Granny Smith</td>
<td>2044</td>
<td>993</td>
<td>813</td>
<td>238</td>
<td>49</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>Red Delicious</td>
<td>1385</td>
<td>690</td>
<td>529</td>
<td>166</td>
<td>50</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>Sundowner</td>
<td>366</td>
<td>184</td>
<td>126</td>
<td>56</td>
<td>50</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>Fuji</td>
<td>110</td>
<td>47</td>
<td>2244</td>
<td>701</td>
<td>43</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>5839</td>
<td>2894</td>
<td>2244</td>
<td>704</td>
<td>50</td>
<td>38</td>
<td>12</td>
</tr>
</tbody>
</table>

MAD = 1.5

*Results/Findings*

Overall, the results in Table 2 show that there are no managerially significant differences between any apple and tomato brand buyers. That is, apple and tomato brands appeal to the same sorts of consumers as each other and do no appeal to unique consumer bases.
Table 2: Summary of MADs

<table>
<thead>
<tr>
<th></th>
<th>Apples</th>
<th>Tomatoes</th>
<th>Apples</th>
<th>Tomatoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Size</td>
<td>1.5</td>
<td>2.7</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Presence of Medium Dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Shopper Sex</td>
<td>1.2</td>
<td>2.8</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Household Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Shopper Employment</td>
<td>1.2</td>
<td>2.6</td>
<td>0.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of Small Dogs</td>
<td>1.5</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure Type</td>
<td>1.2</td>
<td>2.5</td>
<td>1.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Presence of Large Dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Shopper Age</td>
<td>0.7</td>
<td>2.2</td>
<td>1.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Number of Children</td>
<td>1.2</td>
<td>1.7</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Number of Adults</td>
<td>1.1</td>
<td>1.7</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Number of Dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro Segment</td>
<td>1.2</td>
<td>1.6</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Internet Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Shopper Occupation</td>
<td>0.9</td>
<td>1.8</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Number of TV Sets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>1.5</td>
<td>1.1</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Presence of Toy Dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay TV</td>
<td>0.9</td>
<td>1.7</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Average AAE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion and conclusion**

This analysis provides initial empirical evidence that the user profiles of different varieties/brands of fresh apples and (separately) tomatoes are largely similar. The results suggest that marketing managers of fresh categories and produce growers should utilize marketing strategies that appeal to all category consumers, rather than trying to target and appeal to specific consumer segments such as males or females, or narrow age groups. The small differences within the categories mean that no particular consumer segments purchase specific varieties of apples or tomatoes within the category. Social marketing efforts should build mental and physical availability amongst all category buyers to increase the consumption of apples and tomatoes (Romaniuk & Sharp, 2016; Sharp, 2010). Doing so
will achieve the social marketing objective of increasing and maintaining healthful behaviours, such as increasing fruit and vegetable intake.


References


Using Social Marketing to Reduce Salt Intake: A field Trial in Iran

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Introduction/Background

High salt intake is the most important risk factor affecting hypertension. Additionally, intake of salt higher than the recommended amount is directly associated with kidney diseases, increased risk of obesity, osteoporosis, kidney stone formation, and gastric cancer (1). Thus, reducing sodium intake to grams per day can lead to a 30% reduction in the prevalence of high blood pressure and an annual savings of $430 million in healthcare costs associated with patients suffering from high blood pressure (2). Studies in 23 countries with low and moderate income have also demonstrated that decline by 15% in the average salt intake by communities within 10 years can prevent 8.5 million deaths from cardiovascular diseases while such a 20% reduction in smoking can only prevent 3.1 million deaths due to such diseases (3).

World Health Organization (WHO) has also recommended consumption of less than 5 grams of salt per day for each adult if it comes to salt iodine (4). However, international surveys have demonstrated that salt intake in countries around the world is more than this standard level. The average salt intake in most countries across the world is roughly between 9-25 grams per day and this amount in many Asian countries is more than 12 grams a day (5). In Iran, like many countries, daily salt intake is not appropriate and Iranians consume more than 10 grams per day. For example, people living in the city of Yazd in Iran are reported to consume about 10 grams of salt daily (6-7).

Given the values reported in such studies, the need to design and implement effective interventions aimed at cutting down on salt intake among people is important. To find the right strategies for reducing salt intake, employing a pattern of audience-centred model such as social marketing will be very effective because of its focus on audiences’ opinions and attitudes and examining the causes of the given problem (8). In recent years, many countries in the world have proven the use of social marketing model to handle healthcare problems as well as effectiveness of interventions based on the principles of social marketing in several studies (8-10).

In public health, education, marketing and law enforcement, are three main approaches applied to achieve behaviour change. For people who consider the behaviour change but do not have the required knowledge or skills, education is effective. Enforcement of laws and regulation is appropriate for the entrenched people who have no desire to change and resist deliberately. Marketing can be useful to bridge the gap between these two approaches and will be a good solution for those who are aware of the need to change but have not considered changing. So, social marketing considered as an approach to persuade people to accept ideas and attitudes, do healthy behaviours, refer to health facilities, and receive the health products.

To reduce salt intake, many educational programs were found through searching Iranian scientific databases, but we did not find any social marketing based programs to reduce salt intake. So, we decided to design and implement an intervention based on a social marketing planning model to persuade people to consume less salt in Yasuj, Iran.
Method

For designing and implementing of this study, SMART (Social Marketing Assessment and Response Tool) model was considered as the planning model. To access the materials and messages, we needed to a formative research (included of consumer, market, and channel analysis), and using the final packages to modify the intended behaviour (high salt intake). A qualitative study and a quantitative survey were done to do formative research, and a field trial was considered as the interventional phase.

To collect the qualitative data, six focus group discussions by participating of 66 people were established, and a semi-structured guideline which had been designed to explore the participants’ views about salt consumption. The qualitative data were analysed manually using content analysis method to explore the main themes and sub-themes. In quantitative study, 166 people aged 25-50 years referring to urban health facilities completed a KAP questionnaire, and their average salt intake was estimated through measuring sodium in their urine sample and using Kawasaki formula.

By analysing qualitative and quantitative data, the marketing mix components (product, price, place, and promotion) were determined for designing an intervention based on social marketing. After developing and finalizing the messages, a package including a well-developed poster was prepared. Target audience was asked to install the poster in their home kitchens. A phone counselling system was considered to ask their questions and receive the guidance. Additionally, a brief interventions done by physicians and other health personnel, focused on reducing salt intake and using alternatives was designed. Researchers paid attention to reducing the direct and indirect costs and using the suitable places to introduce the messages and materials. For one month, program was implemented for intervention group. Two months later, KAP survey and measuring the urine sodium were repeated for intervention and control groups. The data was compared for two groups, before and after the intervention.

Results/Findings

In qualitative study, five main themes and 31 sub-themes were determined. Most participants agreed that the salt intake was high in Iran. However, most of them considered just high blood pressure as the complication of high salt intake, recommended home-based and family-driven strategies to reduce salt intake, offered using healthier alternatives for salt, and recognized physicians and health care providers in healthcare facilities as the most important to encourage people to reduce salt intake. The quantitative findings showed the average salt intake in our study group was 14±3.52 grams per day.

Most participants had intermediate scores of knowledge, attitudes, and practice. After the intervention, the mean scores of knowledge, attitudes, and practice increased significantly in intervention group. Additionally, compared to control group, in people intervention group the urine sodium and estimated salt intake was improved significantly. They changed from 155.05 to 115.69 milligrams, and 144.34 to 11.33 grams respectively.
**Discussion and conclusion**

The study aimed at reducing salt intake through designing and implementing an intervention based on SMART model. Formative research is the main step to design this consumer-oriented model. Qualitative and quantitative data were used to determine the components of the program. Participants believed that they were having high salt intake and also knew this amount relatively more than one teaspoonful. They were aware and know about the health consequences of high salt intake, but believed that salt was necessary to improve the foods. In the other words, they mostly did not want to reduce the salt consumption, because of the benefits more than barriers. So, social marketing was a potentially effective approach to persuade them to modify their behaviours. Using social marketing mix for provision of products or the given behaviours can also facilitate the moderation of barriers, reinforcement of strategies, reduction of costs, and suggestions for convenient places. According to the findings of this study, the following issues highlighted for lowering salt intake:

1) Teaching reduced salt intake behaviours and use of salt alternatives as *product*

2) Providing free and time-saving trainings as *price*

3) Receiving trainings and interventions at home and healthcare centres as *place*

4) Using physicians and health care providers in healthcare centres and installing posters in kitchens to remind individuals on a daily basis as *promotion*

The effectiveness of the current study showed that consumer-orientation, as analysing the audiences’ views, opinions, knowledge, attitudes, and practices, and designing the intervention based on these findings, is a key element for changing risky behaviours. So, the experts need to pay attention to audience-centred interventions including social marketing.


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Effectiveness of Stages-of-Change Model on Declaration of Intent for Organ Donation

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Introduction/Background

Upon receiving a brand new driver’s license, some of Japanese people realize for the first time that there’s a space in the back to declare one’s intention to donate organs or not. There are similar space in the back of insurance cards and my number card (similar to social security card in the United States). Opportunities to declare one’s intent for organ donation exist in people’s daily lives in Japan. However, many people are not aware of them.

Japan employs an “explicit consent” system for organ donation, where whether to donate organs or not depend on one’s apparent declaration. Under this system, family members must make the final decision if the person in question had not declared his or her intention to donate organs or not. Therefore, individual declaration plays an important role (Uryuhara, 2016). According to the Cabinet Office of Japan (2017), opportunities to declare intent for organ donation in Japan is much diverse than other countries. People may make declarations using health insurance cards, driver’s license, donor card, my number card, and/or online. In a national survey, 87 percent of the citizens responded that they would respect the declared intent of family member in case he or she becomes brain-dead. However, only 12.6 percent of Japanese citizens have declared intention to donate organs or not (ibid. 2017). Therefore, in many critical situations, family members must bear the mental burden to make the decision in a limited time.

We believe that increasing the percentage of people who have declared their intent – whether their declaration is to donate or not to donate organs – will lead to mitigating the burden of family members in case such moment comes. The focus of this study is to promote behaviours to declare one’s intent for organ donation. In doing so, we apply

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“stages of change model” (Prochaska and Veliver, 1997) to design effective interventions. “Stages-of-change” model, derived from research on discontinuation of smoking (Prochaska and DiClemente, 1983) - argues that change in health-related behaviours progress through six stages: pre-contemplation (do not intend to change behaviours), contemplation (thinking about changing behaviours but have not taken action), preparation (have taken some actions to change behaviours), action (less than six months after the behaviour change), maintenance (over six months after the behaviour change), and termination. The theory implies that suitable interventions for behavioural change differ according to where the target audience is in the series of stages. Applying this “stages of change model,” Uryuhara (2016) has suggested five stages of declaring behaviours for organ donation: stage 1 (not interested), stage 2 (interested), stage 3 (made decisions to declare but has not taken action), stage 4 (declared intention), and stage 5 (shared one’s intent to a third person).

This study expands this application to an action research and implement interventions considered suitable in Uryuhara (2016) and other prior studies. We developed a series of interventions named “MUSUBU Campaign” to promote declaration of intent for organ donation in Japan. The campaign lasted from June to October, 2016. While many of these health communication campaigns work closely with mass media, findings have shown that mass media campaign is effective only for enhancing perception on the issue, and not for encouraging actual behaviours (Thomson, 1993; Jacob et al, 1996; Wolf et al., 1997). Targeting minorities in Washington DC, Callender et al. (1997) found that complementing mass media campaign with provision of information through lectures at locations close to people’s living sphere led to an increase in the number of people who declared their intent. From these studies, we took a particular note on the fact that participating in lectures was the success factor, and designed series of interventions that encourage active participation of target audience. This paper describes the interventions made and analyze the results.

**Literature Review**

Declaration of intent for organ donation has been studied in multiple disciplines, from communication studies, social marketing, social psychology, transplantation medicine, to public health. Outcomes of these studies provide hints for interventions to enhance declaration of intent for organ donation. One group of studies focuses on thoughts, beliefs, attitudes, and attributes of individuals to predict and determine what factors lead to declaration of intent, while the other group explores effectiveness of specific interventions.

Several of the first group of research apply theory of planned behaviours (Ajzen, 1985). The theory looks into attitude, subjective norm, and perceived behavioural control, which leads to intention, which then lead to actual behaviours. Powpaka (2008), for example, applied the theory to college students in Hong Kong and found that attitude towards organ donation was the most effective predictor of declaring one’s intent. Attitude, in turn, was affected by perceived consequences of donating organs. In the context of Australian university students, Hyde and White (2009) applied the theory of planned behaviours and
found significant relationships between behavioural, normative, and control beliefs. Horton and Horton (1991) is another example that applied and proved that theory of planned behaviours is an effective model to predict decisions to become a potential organ donor.

Other studies focused on interventions look at the channels used to approach and to communicate with the target audience. Cameron et al. (2013) found an increase of registered donors with the opportunity to declare on Facebook in the context of the United States. Stefanone et al. (2012) experimented three different types of approaches – traditional online advertising, student seeders using social networking services, and challenge campaign – towards university students in the United States and found that while traditional online advertising was the most effective in exposing students to the message, it did not lead to actual registration. Student seeders and challenge campaign, on the other hand, lead to a request for donor card and an actual submission.

This study joins these rich set of studies exploring effective interventions to promote declaration of intent for organ donation. We make four specific contributions to the literature. First, from results of a survey that Uryuhara conducted to 10,000 Japanese (Uryuhara, 2016; see section 3), we present a message transforming the value of declaration from something directly connected to donating organs, to a message for family left behind. The message we suggest and use in the intervention goes beyond the conventionally applied valence framing, adding a dimension to convert the issue from someone else’s problem to one’s own matter. Japanese people tend to consider organ donation as something necessary and good, but not something that they themselves have to take action. People think that someone else will play the role to help those in need. The message we propose and test converts such view. Declaring one’s intent is not to help someone else, but is a message to ease the troubles and burden of one’s own family.

Second, we apply “stages-of-change model” to communication about organ donation. To our knowledge, limited attention has been given to this theory for organ donation (Arriola et al., 2010). Third, we conduct an action research based on survey findings, rather than a lab experiment. Interventions were led by student members of Share Your Value Project (SYVP) with strong interest in encouraging declaration of intent for organ donation in Japan. Because the main target of our interventions are university students, we believe that approaches from their peers will lead to greater impact (Stefanone et al., 2012). Fourth, we bring in the context of Japan in thinking about health communication on organ donation. Japanese society has not been a popular context for research on health communication for organ donation (e.g. Bresnahan et al., 2007). We believe that findings from diverse parts of the world is needed to expand and enrich theoretical understanding of effective health communication.
State of Declaration in Japan: Survey to 10,000 Japanese

Proceeding the action research, the project conducted an online survey to understand the state and background for declaration of intent among Japanese people over age twenty (Uryuhara, 2016). The questionnaire covered diverse aspects surrounding declaration of intent and other related prosocial behaviours. Included were outcome variables (level of interest, attitude, behaviour), factors related to transplantation (knowledge, thoughts on transplantation medicine, commitment), personal beliefs (prosocial behaviours, behavioural norms, aid norms, empathy), impression management, and individual attributes.

Answers from respondents who chose the same answers for all ten questions at the end of the survey as well as those with high impression management were excluded from analysis to minimize bias. We then weighed the responses using a national statistics of Japanese Population by Prefectures, Age, and Gender as of October 1, 2013 (Ministry of Internal Affairs and Communications Statistics Bureau, 2013a) to match the demography by prefectures in Japan, and came up with 10,000 responses as samples for analysis. We believe the survey well represents the state of Japanese citizens.

In conducting quantitative analysis of the obtained data, Uryuhara (2016) conducted factor analysis using SPSS (IBM SPSS Statistics 21) on thoughts for transplantation medicine to confirm reliability and validity. For factors affecting outcome variables (level of interest and behaviours), average values for each item were calculated by groups: interested/not interested in organ donation and declared/not declared one’s intent. Two-tailed t-tests were conducted using SPSS (significance level: p<0.05).

Stages of Declaration Behaviours

Using data on levels of interest, attitudes, and declaration behaviours, samples were classified into four stages: stage 1 (not interested), stage 2 (interested), stage 3 (have made decisions but has not taken action), and stage 4 (declared intention). Survey results found that 43.4 percent were in stage 2 (interested). Those that have made decisions – in stage 3 - were 36.9 percent. Among them, 38.0 percent agreed to donate organs. Those that had declared intention was 19.3 percent, or 52.3 percent of those in stage three. Figure 1 illustrates the distribution. The findings revealed two barriers in the process of declaration behaviours: from stage 1 to 2 – becoming interested – and stages 3 to 4 – taking action based on a decision. We find that making interventions in between these stages is the key in promoting behaviours to declare intent for organ donation.

Factors Affected Interest and Declaration of Intent

Respondents were grouped into those interested/not interested in organ donation, as well as those with declaration/no declaration of intent for organ donation. Average values were calculated for each item within these groups. We then conducted two-tailed t-tests to examine statistically significant differences (significance level: p<0.05). Results revealed that anxiety towards providing organs was higher among those not interested in organ donation compared to those interested. Other factors of perception, knowledge, and commitment
were lower in the former group.

On the other hand, when compared with those that have declared their intent to donate organs, differences in some aspects of commitment was not statistically significant. No significant differences were observed in “opportunities of school education” and “event participation.” However, scores for “presence of someone who have already declared one’s intent nearby” and “conversation with family” was statistically lower. These results reveal that necessary interventions to eliminate the barriers differ by stages of declaring behaviours (Figure 1). Potentially effective interventions to increase interest towards organ donation (stage 1 to stage 2) is to provide knowledge on ‘positive value of organ transplantation’ in school education and/ or at events to enhance empathy and aid norms. To encourage actual declaration based on one’s decision to declare (stage 3 to stage 4), creating opportunities to have a conversation with family, friends, those that have already declared their intent, and to remove anxiety appeared effective.

Figure 1. Identified Candidates for Intervention
In addition to findings from the survey (Uryuhara, 2016), prior studies provide hints for desirable interventions. In encouraging people to take actual behaviours (stage 3 to stage 4), it is important to have eliminated misunderstandings and fear with sufficient knowledge (Shulz et al., 2000). Another effective intervention is to provide access to a specific way to declare one’s intent after interests have increased (Sanner et al., 1995), after having spent much time thinking about organ donation (Skumanich and Kintsfather, 1996; Carducci et al., 1984; 1989).

From these findings, we identified two key interventions. First, stimulating empathy and aid norms through education and events have the possibility of effectively facilitating interests (stage 1 to stage 2). Second, facilitating the perception that declaring intent is important and eliminating anxiety through provision of accurate knowledge may effectively encourage declaration of intent (stage 3 to stage 4). We conducted an exploratory action research to examine the impact of these interventions.

**Method**

We describe the interventions designed and implemented as a five-month campaign to encourage declaring behaviours. Also described are analysis conducted assess the effectiveness? The target of our interventions is university students, primary studying social sciences and humanities at Doshisha University, a private university in Kyoto, Japan. University students have the most opportunities to be exposed to declare their intentions to donate organs or not, as they often acquire driver’s license for the first time or face the necessity to carry insurance cards as they begin to live by themselves. According to the Ministry of Internal Affairs and Communications Statistics Bureau (2013b), over 90 percent of university students in Japan are non-medical students and social sciences is the most popular discipline. Furthermore, 84 percent of them study at a private university. As such, we believe our sample well represents the demography of university students in Japan.

**Overview of “MUSUBU Campaign”**

Action research for this project was led by an organization named “Share Your Value Project (hereafter SYVP).” SYVP was founded in April 2015 as student-led organization that aims to encourage people to think about declaration of intent for organ donation within themselves and with others, and to promote sharing of valuable decisions made with significant others.

Based on the findings from aforementioned survey as well as prior studies, we designed and implemented a series of interventions called “MUSUBU Campaign” (Figure 3). The campaign makes series of interventions to encourage people to leave their intentions on organ donation in tangible forms. The campaign takes the participants through the process of gaining interests in declaration of intent for organ donation, acquiring accurate knowledge, and having conversations with family and other close people. The campaign aims to bring participants to stage 4 of the stage-of-change model – ‘declared intention’.
The first intervention of our campaign aimed to encourage people to move from “stage 1 (not interested)” to “stage 2 (interested).” SYVP held a 30-minute workshop at Doshisha University in June and July, 2016 to present the positive value of one’s intent for organ donation. We chose the style of workshop based on findings from the aforementioned survey (Uryuhara, 2016) that “empathy through events” is an effective intervention to stimulate people without interests. As the positive value of declaring one’s intent, we presented two messages: leaving one’s intention will mitigate the burden of the family in case the decision must be made, and declaration of intent does not mean donating organs but is a message for family left behind.

There were two creative points in the workshop. First, SYVP provided light meals to encourage participation. Second, the workshop intentionally did not use the expression “declaration of intent for organ donation.” We assumed that participants would have little familiarity with such phrase. Instead, we emphasized “connection with family.” Making an announcement to hold a “workshop on declaration of intent for organ donation” will not capture attention of people without interests on organ donation or declaration of intent.
Stage 2 (Interested) to Stage 3 (Have Made Decisions But Has Not Taken Action)
The second intervention of MUSUBU campaign aimed to encourage people to move from stage 2 (interested) to stage 3 (made decisions). SYVP distributed an original guidebook explaining the importance of declaring one’s intent as well as frequently asked questions. Also distributed was a check card to workshop participants between August and September, and created an opportunity to think about declaration of intent for organ donation with significant others. This intervention aimed to facilitate understanding of declaration of intent among those that gained interest, and to lower barriers for having a dialogue on the issue with family and friends.

Stage 3 (Have Made Decisions But Has Not Taken Action) to Stage 4 (Declared Intentions)
The final phase of the campaign aims to move people from stage 3 (made decision) to stage 4 (declared intentions). On October 16, SVYP hosted an event to challenge the Guinness World Record™ of “The Largest Organ Donation Awareness Lesson” at Doshisha University. We designed this event based on the findings from the aforementioned survey that in order to facilitate declaring behaviour, it is important to provide accurate knowledge and to eliminate misunderstanding and fear.

The event proceeded as the following. SYVP first provided accurate knowledge on organ donation and declaration of intent through the challenge to the Guinness World Record™. This was followed by “Five Minutes to Think about Your Family.” This was a time for participants to think about declaration of intent individually and to eliminate fear and anxiety. During this five minutes, we distributed SYVP’s original donor card. Through series of interventions, the campaign aimed to cover necessary factors revealed important for promotion declaring behaviours in the survey (Uryuhara, 2016) and prior studies.

Interventions to Facilitate Behaviours
Findings from the aforementioned survey led to emergence of hypothesis to facilitate declaring behaviours. SYVP designed series of interventions from these results. The hypothesis focus on moving people from stage 3 (made decisions) to stage 4 (declared intention). First, an intervention must provide accurate knowledge and time to think to people ignorant or with misunderstanding about organ donation and declaration of intent. Doing so will enable them to perceive its importance and to lower fear as well as anxiety. Second, providing time to think about the significance of declaring one’s intent will transform the image of organ donation and declaring behaviours into something favourable. Finally, providing a specific method to declare one’s intention while the participant’s level of involvement is high will facilitate declaring behaviour.
Based on the hypothesis, our intervention named “MUSUBU approach” first implemented an awareness lesson as a Guinness World Record™ challenge. The lesson aimed to provide accurate knowledge on organ donation and declaration of intent, and to eliminate anxiety. We then designed “Five-minute to Think about Your Family” to provide time for individuals to think about the significance of declaring one’s intent. At the end, we provided SYVP’s original donor card. Each component of our intervention is described below.

**Awareness Lesson**

In order to explore what knowledge should be provided in the lesson, SYVP first conducted an interview to eleven university students studying social sciences and humanities in Doshisha University. Results revealed potential effectiveness of three types: knowledge on brain death, knowledge on organ donation, knowledge on declaration of intent.

‘Knowledge on brain death’ included the fact that brain death is different from vegetative state, and that human beings will not recover once he/she is brain dead. ‘Knowledge on organ donation’ included the actual procedure of organ donation and the state of human body after organs have been taken out for donation. ‘Knowledge on declaration of intent’ included ‘When the family becomes brain-dead, 87 percent of the Japanese citizen want to respect his/her will,’ and ‘You can rewrite your declaration of intent’.

SYVP developed the awareness lesson plan based on these items. We also referred to implications from studies of science, technology, and society that general public emphasize trustworthiness of information source (Hirakawa, 2001). We therefore decided that a lesson given by “experts with authority” would enhance the effectiveness of the intervention. SYVP
invited Dr. Hiroto Egawa, President of The Japan Society for Transplantation, to be the lecturer for the lesson

**Five Minutes to Think about Your Family**
In this part of the event, we provided time and space to think about declaration of intent immediate after acquiring accurate knowledge in the awareness lesson. We aimed to enhance the “level of involvement” to declaration of intent, influence change in perception and image on declaring behaviours, and to take action on the spot.

Because all participants at this point had invested considerable time to the event - coming to the venue, listening to the opening remarks, and the awareness lesson – we assumed that “level of involvement” is already quite high. A member of SYVP made a speech and asked participants to image a situation where they became brain dead, and the family must make the final decision of whether to donate organs or not. Participants were asked to think about their family and significant others.

Furthermore, in order to deepen “level of involvement” among the participants, we used “foot-in-the-door technique” (Freedman & Fraser, 1966). The five-minute speech included eight specific requests (including one minute to declare one’s intent). Requests consisted of small requests where high rate of agreement is expected, larger requests which includes the key action for agreement, and dummy requests with lower necessity to achieve our primary objective. This technique increases the probability of agreement to declare one’s intent with small and larger requests, while mitigating the sense of being forced to declare with dummy requests at the end.

The speech included three small requests (close your eyes, think about your family, image a scene where you can no longer express your intent), one larger requests (declare one’s intent), and three dummy requests (hold the donor card, share the knowledge and thoughts gained in the event with their family after going home, rewrite one’s intention every time it changes). The main request of declaring one’s intent was complemented by related requests such as take out a paper and pen, writing down one’s intention in the original donor card, write a message for his/her family on the card, and folding the card, intentionally asking the participants to do the final task. We expected these segmented requests will facilitate smoother access to the media to declare one’s intention.

**Provision of Original Donor Card**
We distributed an original donor card to the participants (Figure 6). The aim was to promote declaring behaviours among participants whose “level of involvement” towards declaration of intent has heightened following the “Five-minutes to Think about Your Family,” and to lower the hurdle for actual declaration.

In creating this original card, SYVP referred to findings from an exploratory study conducted in 2015 targeting people with donor card but have not declared one’s intention. We also conducted interviews with 24 university students to understand their thoughts and images
about existing donor cards. As a result, we found that the new media for declaring one’s intent must be something that people would not want to postpone writing down one’s intention and something that they’d want to carry around. We also found that descriptions on the card should be simple and easily written so that anyone can understand.

SYVP came up with the concept of “letter” and worked out the design and content of the original donor card. The final outcome was an envelope-shaped card with a space to write a message for one’s significant others. This space gives an additional function to the card other than declaring one’s intent to donate organs, and symbolically present a new value that “declaration of intent is a message that one should leave for significant others.” Warm colours such as orange were used to give an impression of familiarity and comfort (Hirayu, 2002). Corners of the card was also rounded to give an impression of ease.

SYVP then came up with descriptions “easy to understand” to print in the card. We decided to use the phrase “your current intent” in order to show the easiness and lower the hurdle. The card also included the phrase “You can change your intent again anytime” to mitigate mental burden on making a declaration. Based on the hypothesis, our intervention named ‘MUSUBU approach’ first implemented an awareness lesson as a Guinness World Record™ challenge. The lesson aimed to provide accurate knowledge on organ donation and declaration of intent, and to eliminate anxiety. We then designed “Five-minute to Think about Your Family” to provide time for individuals to think about the significance of declaring one’s intent. At the end, we provided SYVP’s original donor card. Each component of our intervention is described below.

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**Questionnaire and Methods of Analysis**

Four hundred and thirty three (433) participants to the “MUSUBU Approach” were asked to answer a questionnaire on paper twice during the event, before the Guinness World Record™ challenge and after the “Five-Minute to Think about Family.” We consider answers provided in the former as “pre-intervention” and those provided in the latter as “post-intervention.”

Items used in the questionnaire were as follows: “knowledge on brain death, organ donation, and declaration of intent,” “perception on organ donation and declaration of intent, (If the person is brain dead, and he/she is dead; I am worried about organ donation; It is important to declare one’s intent),” “image on declaring one’s intent for organ donation (useful, scary, proud, familiar, family, anxiety, thinking about each other, connection),” “stages of change in declaring behaviour,” “direct triggers for declaring intent (Time was given to declare my intent; A card to declare intent was distributed; Those sitting close to me were declaring their intent; Many others at site were declaring intent; Listening to the lesson by an expert (Dr. Egawa),” and “personal attributes (gender, age, profession).”

In analysing the answers for “knowledge on brain death, organ donation, and declaration of intent,” one point was given for each correct answer and zero for incorrect ones. Five point Likert scale was used for capturing “perception on organ donation and declaration of intent,” “image on declaring one’s intent for organ donation,” and “direct triggers for declaring intent.” “Strongly agree” was given five points, “agree” four points, “neutral” three points, “disagree” two points, and “strongly disagree” one point. Five-point Likert scale was used for capturing stages-of-change for declaration of intent: five points for having shared one’s declared intention with family and significant others (stage five); four points for having declared one’s intention (stage four), three points for having decided to declare one’s intention but has not taken action (stage three), two points for being interested and thinking about declaring one’s intent (stage two), and one point for not being interested (stage one).

Average for pre- and post-interventions were calculated for all items. We conducted two-tailed t-tests using SPSS to examine whether knowledge was acquired, images changed, and whether participants moved up the stages-of-change. The results are presented below.

**Results/Findings**

Collection rate of questionnaire was 95 percent. We excluded respondents who did not answer one or more questions on stages-of-change, knowledge, and perception. 362 samples qualified for analysis. Percentage of declaration of intent among our sample was 16.8 percent. This is slightly higher than 12.6 percent, the national average of Japan revealed by a survey of the Cabinet Office (2013).
Knowledge Acquirement
Knowledge related to brain death (Human beings will not recover once he/she is brain dead; Brain will become soupy one to two weeks after becoming brain dead; Human beings may recover from a vegetative state), knowledge on organ donation (The body will be returned in a clean condition; the body will be returned in 2 to 6 hours; There is no cost for donating organs), and knowledge on declaration of intent (Your family will bear the burn if the intent is not declared; When your family becomes brain dead, about 90 percent want to respect his/her will; “Do not donate organs” is an option for declaring intent, You can rewrite your declaration of intent).

Two-tailed t-tests using SPSS revealed that all knowledge was acquired in a statistically significant manner (p<0.001) except for “Your family will bear the burden if the intent is not declared” and “You can rewrite your declaration of intent.” Show the results or findings. Provide excerpts from your data to illustrate.

Change in Perception towards Organ Donation and Declaration of Intent
Average value for items on perception towards organ donation and declaration of intent was calculated. Pre-intervention scores were: If the person is brain dead, and he/she is dead (3.15); I am worried about organ donation (3.24); It is important to declare one’s intent (4.23).

Post-intervention scores were: If the person is brain dead, and he/she is dead (4.15); I am worried about organ donation (2.77); It is important to declare one’s intent (4.66). Two-tailed t-tests using SPSS revealed that all knowledge was acquired in a statistically significant manner (p<0.001) except for “Your family will bear the burden if the intent is not declared” and “You can rewrite your declaration of intent.” Two-tailed t-tests using SPSS revealed that all items on perception changed favourably in a statistically significant manner (p<0.001).

Change of Image on Declaring Behaviour
Average value pre-intervention was calculated for each item on images towards declaring behaviours. The results were: useful (4.51), proud (3.11), familiar (2.48), family (3.41), and thinking about each other (3.65), connection (3.68), scary (2.96), and anxiety (3.16).

After the interventions, the average value was as follows: useful (4.78), proud (3.80), familiar (3.67), family (4.24), thinking about each other (4.25), connection (4.35), scary (2.54), and anxiety (2.70). Two-tailed t-tests using SPSS revealed that all items on image had changes favourably after the intervention (p<0.001).

Change in Stages-of-Change in Declaring Behaviours
Average values for scores of stages-of-change was 2.29 before intervention, and 2.93 after intervention. Two-tailed t-tests using SPSS revealed that changes in stages were promoted in a statistically significant manner (p<0.001). Looking at the percentage of participants whose stages changed with intervention, 48 percent experienced no change, 37 percent moved up one stage, 13 percent moved up more than two stages.
Table 1 presents the exact number of participants in stages before and after the intervention. Ten out of 105 “not interested (stage 1)” participants, 24 out of 139 “interested (stage 2)” participants, 31 out of 57 participants (made decisions but have not declared (stage 3)” moved up one or more stages and newly declared his or her intention to donate organs or not. This totals up to 65 participants showing direct behavioral change, accounting for 18 percent of all participants. As a result, the final percentage of declaration of intent for organ donation among the participants of “MUSUBU Approach” reached 34.5 percent.

Table 1. Stages Before and After the Intervention

<table>
<thead>
<tr>
<th>Stages before Intervention</th>
<th>Stages after Intervention</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 Not Interested</td>
<td>Stage 2 Interested</td>
<td></td>
</tr>
<tr>
<td>Stage 3 Made Decisions But Have Not Declared</td>
<td>Stage 4 Declared Intention</td>
<td></td>
</tr>
<tr>
<td>Stage 5 Declared and Shared Intention with Family and Friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1 Not Interested</td>
<td>20</td>
<td>65</td>
</tr>
<tr>
<td>Stage 2 Interested</td>
<td>1</td>
<td>76</td>
</tr>
<tr>
<td>Stage 3 Made Decisions But Have Not Declared</td>
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<td>5</td>
</tr>
<tr>
<td>Stage 4 Declared Intention</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stage 5 Declared and Shared Intention with Family and Friends</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>146</td>
</tr>
</tbody>
</table>

**Triggers of Declaration**

What were the direct triggers to declare one’s intent among the 65 participants who did so at the venue? Over 90 percent of them answered “yes” to “Time was given to declare my intent,” “A card to declare intent was distributed,” and “Listening to the lesson by an expert.” “Those sitting close to me were declaring their intent” and “Many others at site were declaring intent” were not chosen as direct triggers.

**Discussion and conclusion**

After the series of interventions, acquirement of knowledge was statistically significant with exception of only two items. We assume that one of the exceptions “You can rewrite your declaration of intent” was not statistically significant as many had already answered this question correctly before the intervention. The other exception “Your family will bear the burden if the intent is not declared” may be affected by the fact that no specific case nor data was presented to provide knowledge. Another potential explanation is presence of strong element of attitude in answering this question.
Our action research with series of interventions matching stages-of-change led to a desirable change in knowledge, perception on organ donation and declaration of intent, as well as image on declaring behaviours. Our findings reveal the importance of providing a specific method to declare one’s intent, after provision of accurate information and enhanced level of commitment.

Our study has several limitations. First, we were not able to assess individual effect of providing accurate knowledge, enhancing commitment, and providing access to specific method to declare one’s intent. We were not able to examine how they each contributed to behavioural change. Second, the study could not examine in detail how much the atmosphere of unusual event – challenge to a Guinness World Record™ affected participants’ behaviours. Finally, our study only examined behavioural change immediately after the intervention. Furthermore, given the span of time at the time of intervention, stage 5 (shared declared intention with significant others) was beyond the scope of this study.

We intend to conduct a similar action research to population with diverse attributes – in addition to university students – and accumulate findings to develop evidence for promoting declaration of intent for organ donation. Share Your Value Project will realize a society where people respect the intention of those who pass away.


References


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The use of cannabis seeds as a natural contraceptive: A case of Zambia

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1 Lucy Nyundo has teaching experience, worked as a Research Assistant on the Climate Justice project and has particular interest in social research.
2 Lynne Eagle is a well accomplished Academic and Social Marketing expert.
3 David Low has vast experience in Marketing, especially across cultures.
4 Maxine Whittaker is an expert in Reproductive Health and Social Research for Public Health.
5 Dickson Mwansa has vast experience in Zambian education system and expert in Theatre for Development.
**Introduction**

The link between population growth or fertility rates and socio-economic development is unquestionable, hence, the increasing call for more investment in family planning programs and research (Phumaphi, 2011; Bongaarts et al, 2012; Cleland et al, 2006). Zambia is a country in Sub-Saharan Africa with one of the highest fertility rates in the world, high unmet need for modern contraceptives, high rate of teenage pregnancy, high HIV/AIDS prevalence rate, high occurrence of early marriages and a predominantly young population (Central Statistical Office, 2009; 2014; World Population Review, 2017). In response to this harsh reality, the Zambian government is determined to transform the economy by taking advantage of the opportunity that this demographic dividend presents. That is, a period of rapid economic growth as a result of a large young working population and reduced fertility rates coupled with enhanced good governance, sustained investment in education, health and increased job creation (Ministry of Finance, 2015).

Even though 50%-70% of women in Zambia use some form of contraception and there is almost universal awareness and knowledge about family planning, uptake of modern contraceptives still remains low (United Nations, 2015). Given a literacy rate of 68% among women aged 15-49 years and a projected 67% of intent to use modern contraceptives (CSO, 2014), it is clear that there are more complex barriers to the uptake of modern contraceptives beyond the frequently cited barriers of constrained access to health centres, frequent stock outs of preferred contraceptives, cost, lack of information about family planning (United States Agency for International Development, 2014) and the social barriers such as disapproval of spouse, relatives and religious norms (Muanda et al, 2016). Moreover, in the recent past, the fear of side effects of modern contraceptives such as weight gain, headaches and irregular periods has emerged as a very strong barrier because of this; myths, fears and misperceptions about modern contraceptives such as reduced sexual pleasure, infertility and health concern (cancer) have been compounded (Blackstone et al, 2017; Gueye et al, 2015). As a result women, especially in Africa increasingly prefer more concealable contraceptives with less side effects as a means of spacing births. In the face of this, some women resort to the use of herbs such as cannabis as a form of natural contraceptive perceived to have negligible side effects.

**Purpose of the Research**

From historic times, cannabis has been used as a medicinal herb for treatment of menstrual cramps and to ease child birth in addition to being a remedy for pain, anxiety, depression, insomnia, appetite loss and asthma etc. (Australian National Council On Drugs [ANCD], 2014) but because of lack of prescribed dose and length of treatment resulting in either no effect or adverse effect, it was removed from the register of medicines (Copeland & Clement, 2014). However, evidence from current clinical medical cannabis research has reignited the potential of medicinal cannabis for possible treatment of various health conditions and diseases such as epilepsy, cancer and AIDS (Grotenhermen & Müller-Vahl,2012; Carlini et al, 2017; Newton-Howes & McBride, 2016). Nonetheless, the debate on whether to fully regularize medical cannabis still continues due to the lack of clinical evidence on effective dosing, route of administration, side effects, myriad plant compositions and the blurred line between clinical and recreational cannabis (Carliiri et al, 2017;
Newton-Have & McBride, 2016). The ANCD (2014) describe the current debate on the use of medicinal cannabis as complex because it is difficult to explicitly and simultaneously address medical and scientific questions as well as legal and ideological questions. Perhaps, this explains why medical practitioners are reluctant to recommend the use of medicinal cannabis even in cases where there is a legal framework that guides its use (Carlini et al, 2017).

Notably, the available high quality but scanty evidence of the efficacy of medicinal cannabis is biased towards clinical trials in the treatment of epilepsy, multiple sclerosis and symptoms of pain, nausea, vomiting and appetite in cancer patients using cannabis plant or herb (University of Sydney, 2016). There are no clinical trials on the cannabis seeds, specifically as a natural contraceptive. Therefore, the claimed use of cannabis seeds as a natural contraceptive among women in Zambia (Lusaka Times, 2006), is a peculiar case that needs in-depth understanding of how this is used in order to either deter mass use for feared long-term side effects or spur technical clinical research in the properties of cannabis seeds in relation to reproductive biology.

**Methodology**

This exploratory study of the use of cannabis seeds as a form of contraceptive will rely on a minimum of 30 face to face in-depth interviews of personal experiences. Saturation point technique will be relied upon to determine the sample ceiling point, by identifying the point when no new perspectives, insights, themes or information will emerge from the respondents (Townsend, 2013). This is a common practice in qualitative research and is appropriate for this study for purposes of tapping into the possible indigenous knowledge about the cannabis seed. Attention will be paid to the source and type of the seed, reason for opting to use it as a contraceptive and reasons for using the cannabis seed as opposed to the actual cannabis herb or plant, indigenous knowledge about possible dose levels and length of treatment. These will be linked to sexual behaviour and fertility of the respondents in order to qualitatively draw or dispute the potential use of medicinal cannabis seeds in the prevention of pregnancy. The data will be analysed using manual content analysis using the guidelines provided by Bender and Ewbank (1994). In addition, coding scheme and verbatim techniques will be used to validate the results.

**Implications of the Research Results**

This study will use social research techniques in order to explore a peculiar contraceptive practice (i.e. cannabis seeds). While the use of natural contraceptives and herbs is reported in some population segments in Africa, few studies specifically explore these practices in detail. Therefore, the results of this study can be used to design appropriate, evidence based and target specific Social and Behaviour Change Communication about natural or traditional contraceptives. This is in view of the wide spread fear of side effects of modern contraceptives amid myths and misinformation in many African countries. Furthermore, the results can also be used to train family planning service providers on how best to handle peculiar contraceptive practices in certain societies. This preliminary study will provide evidence to consider a) the need to understand user perspectives and concerns b) to continue research into traditional medicines if there are therapeutic values and pathways in various settings.

References


Paper Session: Non Mainstream Communities and Groups

Session Chair:

Jodie Wrigley
What are you waiting for? Understanding young Adults’ obstacles to organ donation discussion

Kathy Knox, Joy Parkinson, Ali Ahani

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¹ Dr Kathy Knox, Ph.D., is a research psychologist with expertise in human development, attitude and health behaviour change across a range of settings. Kathy is a member of the Menzies Health Institute Queensland and Research Fellow with Social Marketing @ Griffith leading a rapidly developing program of empirical research on social behaviour change. Kathy’s research focus is on communities and sustainability behaviours including health education and communication, reducing food waste and excess water use, increasing recycling and organ donation. Kathy has direct experience in designing and conducting community-based interventions and has evaluated local and national interventions to change awareness, knowledge and cultures of behaviour.

² Dr Joy Parkinson, Ph.D.’s program of research focuses on social marketing, behaviour change and social media marketing to encourage behaviour change. Digital and online behaviour change programs that Joy has been involved in the design and development of, for example, Mumbubconnect, have seen significant uptake and positive behaviour change outcomes including breastfeeding and weight loss. Joy has expertise in consumer audience segmentation for a range of behaviours including physical activity and disaster preparedness. Joy is experienced with conducting research and programs with a variety of target audiences including vulnerable populations such as obese and CALD populations in Australia.

³ Dr. Ali Ahani, MBA, PhD., has recently finished his Ph.D. in Business Informatics and has published in peer-reviewed scientific journals such as Scientific Reports–Nature and Health Informatics. Ali’s background in marketing and information systems provides him an effective vision for social marketing and health informatics research. Ali has provided research assistance on the Developing the DonateLife App since DonateLife Week 2016. Ali is an experienced research assistant with Social Marketing @Griffith research center and has assisted in collecting and analyzing quantitative data, promoting organ donation in the community, and addressing barriers to organ donation discussion in culturally and linguistically diverse groups.
Introduction/Background
The purpose of this exploratory pilot study was to expand existing knowledge to better understand barriers to discussing organ donation with family among young Australian adults. Findings will inform a larger program of research which can ultimately be used to develop and implement theoretically driven social marketing behavior change interventions to increase discussion among young adults, with the broader goal being to increase awareness and registrations among young adults; and decrease the percentage of young adults who are undecided by increasing family discussion about organ donation.

Although transplantation is the only therapeutic option for terminal organ failure, the number of organ transplants reaches less than 10% of world need annually, resulting in significant organ shortage (Citerio et al., 2016). Only 8% of young Australians aged 18 to 24 are registered on the national Australian Organ Donor Register (Opdam, 2016) while there are at least 1,340 Australians on organ transplant waiting lists (OTA, 2017). Talking about organ donation is an important behaviour because under Australia’s opt-in policy, a potential organ donor’s family will be asked to confirm donation and will have the final say. Building on the Motivation Opportunity Abilities (MOA) framework (Thøgersen, 1995) and empirical evidence from donor families, existing literature suggests the interaction of motivation, opportunity, and ability drives discussion behaviour regarding organ donation. Family discussion directly impacts donation consent. Consent rates can reach 93% when donor wishes are known compared to 47% when unknown (Smith, Massi Lindsey, Kopfman, Yoo, & Morrison, 2008). Therefore, talking with family about a decision to donate organs is an important factor in addressing organ shortage. However, a unified theory of organ donation decision and communication, and relevant research on effective methods for promoting communication about organ donation among young adults is currently lacking. Hence there is a research gap concerning young adults’ barriers to organ donation discussion.

Method
Pilot survey data were collected from a convenience sample (n = 270) using a brief survey instrument containing ten questions in English. Data were collected during orientation week at five university campuses in Australia. Decision status (decided/undecided) and donor status (not registered/registered) were recorded along with family communication status (not discussed/discussed). Remaining survey items were based on prior studies of family discussion of organ donation (Siebelink, Albers, Roodbol, & Van de Wiel, 2014; Volz Wenger & Szucs, 2011). All respondents were asked to give further information about barriers to the discussion: “Why have you not talked about organ and tissue donation with your family?” Age, gender, nationality and religious affiliation were recorded. Descriptive exploratory analyses were conducted using SPSS version 24: Bivariate relationships between family communication status, and sociodemographic characteristics were compared using chi-squared tests for association. Participants who reported having discussed organ donation with family (partner, child or parent) were compared with those who had not. Free-text
responses regarding barriers were qualitatively coded into thematic categories representing semantically different explanations or justifications for the absence of family discussion of organ and tissue donation.

**Results/Findings**

Of the 270 respondents, 58% \((n = 156)\) were female. One third of participants (32.2%) were of Nationality other than Australian. Age ranged from 16 to 63 years of age, the median age was 22 and the modal age of respondents (15%) was 20 years of age. Almost 60% \((n = 161)\) of respondents had not discussed organ and tissue donation with family (partner, child, or parent). Chi-squared tests for independence indicated decision and discussion were significantly associated: Respondents who had made a decision were significantly more likely to have discussed organ donation with family (78.0 vs 46.6%, \(p < .001\)). Respondents who had registered a decision were significantly more likely to have discussed with a family member (33.3 vs 9.2%, \(p < .001\)). Those who had discussed donation with family were more likely to be older (50.8 vs 31.5%, \(p < .001\)), and Australian (46.3 vs 29.9, \(p = .011\)). There was no association between family discussion, gender, or religious affiliation \((p > .05)\).

The most frequently cited barrier to discussing with family was lack of opportunity: "hasn’t come up" (30.5% of all barriers); followed by lack of consideration: "haven’t thought about it" (25.2% of all barriers). The absence of perceived need: "I think I have, years ago" (13.7%) and low issue awareness: "I have no idea what it is about" (12.2%) were obstacles cited less frequently, but are arguably more readily addressed with social marketing.

**Discussion and conclusion**

These initial findings highlight the need for targeted, theoretically based social marketing strategies to convert positive decisions into behavioral goals (i.e., family discussion), and overcome common barriers surrounding organ donation as perceived by young adults, such as creating convenient opportunities for discussion with family. There are multiple implications for social marketing practice in this context. The main barriers to discussion were consideration and opportunity: categories which are subtly different but amenable to simple motivational strategies. However, these barriers are superficial, and our pilot findings suggest that scratching the surface with a more in-depth qualitative inquiry might unveil deeper motivations and barriers among young people. On a practical level the current findings were used to inform development of a discussion guide for focus groups, as part of the larger program of research.

Based on MOA theory (Thøgersen, 1995) and Trans-Theoretical Model (Prochaska & DiClemente, 2005), provision of opportunity could support the mechanisms of change through stages of readiness or contemplation, leading to behavior change. Lack of consideration reflects the absence of prior thought and reflection, and is not surprising given the demographic profile of respondents. However, findings suggest strategies that engage audience members and address common barriers, for example by provision of a nudge, reminder or simple prompt, could boost organ donation behaviors [paper in
preparation]. Insights from this study underline that conversations about organ and tissue donation (or other health topics) should be repeated behaviors, and discussion with family is important and should be accepted and valued experience, yet is seen as ‘not needed’ by young adults. Current findings contribute to developing a social marketing model of organ donation decision and discussion, however considering the cross-sectional and descriptive nature of our exploratory pilot study, causal conclusions cannot be drawn. Nevertheless, patterns of behavior and barriers observed in this sample reveal genuine opportunities for future theoretically informed intervention design.


References


Recognition and adoption of idealised attractiveness types by boys: A developmental perspective.

Graham Ferguson and Sonia Dickinson-Delaporte

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Abstract
Young people in Western society are burdened with body image pressure leading to self-esteem issues and other disorders. Historically it has been considered a female issue however, the incidence of body image dissatisfaction is growing amongst males. Similar to prior studies on girls, the current study seeks to track the development of boys’ ability to recognize, internalize, and adopt ‘their’ idealized attractiveness type. An initial set of findings shows that boys are much less able to do this than prior research has shown for girls: 7-8yos struggle to identify attractiveness types, exhibit fear response to unfamiliar types and aren’t selective in their idealised images; while 9-12yos exhibit some ability to recognize attractiveness types and are able to articulate a basic (compared to girls of the same age) idealized image for themselves. This shows that boys develop these abilities later and that we need to include older boys.

¹ Graham Ferguson is a lecturer at Curtin University’s School of Marketing in Perth, Australia. He spent almost 20 years as a practicing marketer in industrial marketing positions and marketing consulting roles. Graham has been in a teaching and research role at Curtin University since 2012 and his research interests are gamification, complexity theory, self-identity, luxury branding, and advertising. He has published in Tourism Management, The Journal of Consumer Marketing, the Australasian Marketing Journal, and Young Consumers.

² Sonia Dickinson-Delaporte is an Associate Professor at Curtin University’s School of Marketing in Perth, Australia, where she teaches marketing communications with an emphasis on digital communication. Her areas of research interest include advertising self-regulation, message-source effects in advertising, empowerment issues in social media, and brand management. Her work has been published in the Journal of Advertising Research, European Journal of Marketing, Journalism and Mass Communications Quarterly, Journal of Business Research, International Journal of Advertising and the Journal of Marketing Communications.

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middle school boys. Body Image, 3(2), 121-129.


Appendix

Table 1: Outcomes across programs.

<table>
<thead>
<tr>
<th></th>
<th>Extended Program group</th>
<th>Brief Program group</th>
<th>Control group</th>
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<td></td>
<td>N</td>
<td>Pre M (SD)</td>
<td>Post M (SD)</td>
</tr>
<tr>
<td>Attitudes 2</td>
<td>336</td>
<td>-1.3 (1.3)</td>
<td>-1.6 (1.3)</td>
</tr>
<tr>
<td>Intentions 3</td>
<td>333</td>
<td>1.8 (1.4)</td>
<td>1.7 (1.5)</td>
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<tr>
<td>Social Norms 5</td>
<td>330</td>
<td>2.4 (1.0)</td>
<td>2.3 (1.0)</td>
</tr>
<tr>
<td>Self efficacy 4</td>
<td>318</td>
<td>4.7 (1.3)</td>
<td>4.5 (1.6)</td>
</tr>
</tbody>
</table>

Note: 1 bipolar items (−3 negative to positive 3); 2 seven point unipolar scale (1–7); 3 six point scale (1: I am very sure I could NOT resist drinking – 6: I am very sure I could resist drinking)

*p < 0.05.
**p < 0.01.
***p < 0.001.
Introduction and background
The National Disability Insurance Scheme (NDIS) is a nation-wide government policy designed to support people living with a disability (PWD) and constitutes a significant reform in the provision of disability funding in Australia (Price Waterhouse Coopers 2011). This reform is a rapidly implemented response to the poor living conditions for PWD, as identified in the Australian Productivity Commission’s report in 2011. It is founded on the social aim of empowering PWD with choice and control so they can "live an ordinary life" ("About the NDIS" 2017, pg. 2). As such the implementation of this policy could have benefited from the application of social marketing strategy from the beginning, as the intent of this policy is to drive behavioural change for social good. However, the systematic application of marketing processes to achieve this social change (ISMA, ESMA and AASM, 2013) has been largely overlooked. This is evident in the absence of traditional downstream campaigns to engage with end users. Industry experts in service provision in the Western region have been dependent on a few “lynchpin” people to disseminate, often through
word of mouth, the constantly evolving details of the implementation of the scheme. In addition to preparing themselves, service providers have also had the responsibility of preparing PWD for the transition.

The reform includes a radical shift to the personalisation of funding, rather than block funding to service organisations and as such has significant implications for both service providers and PWD’s. In particular, disability support service providers now have to operate in a competitive marketplace and compete for funds allocated to the participants. People with a disability who were previously recipients of services are now expected to be active participants and need to learn how to become consumers in this new market. We have been conducting research project studying the impacts of the NDIS on both types of stakeholder, the focus of this paper is on the impacts on the midstream stakeholders: the disability support service providers.

In the following discussion we examine how the rapid and dynamic nature of the NDIS implementation process has impacted regional disability support service providers and their ability to be strategic in their response to this change. We discuss three significant challenges arising from the transition for service providers: service provider operations, transport, and planning meetings. We use Rothschild’s (1999) Motivation (internal influences), Opportunity (external influences) and Ability (internal influences) Model (MOA), as a framework to explore the impacts of those challenges on disability support service providers as they are both a target of social change as well having a role in facilitating the change for PWD.

**Method**

These preliminary findings are based on a thematic analysis of 30 semi-structured in-depth interviews with industry experts representing upstream and midstream stakeholder organisations in the Western Region of NSW during the NDIS transition (which began on 1st July 2017). A snowballing technique was used to recruit industry professionals. Thematic analysis was conducted using NVivo. A number of techniques were used to ensure the robustness of the analysis, themes were considered important when they were repeated across interviews and reflected issues previously identified in literature or were considered to identify new areas of concern.

**Results**

Three aspects of the NDIS challenged the motivation, opportunity and ability of service providers during the transition: service provider preparation, transport funding and planning meetings. The preparation of disability support services for the transition was a concern for respondents (e.g., Interview 2, 10, 6, 12). This transition is perhaps most disruptive for service providers as it immediately impacts on their sustainability and funding for day-to-day business activities. Industry experts from upstream organisations expressed difficulties convincing some service providers about the magnitude of the change and the implications this would have for their businesses. At a fundamental level the nature of their business
operations is changing, however some are choosing not to act (Interview 2). This was indicative of a lack of motivation by some to engage in the behaviour change required. Further, there were discussions about the ability of organisations to survive the transition (Interview 1, Interview 2), their ability to afford back-of-house administrative systems and process under the new funding model (Interview 10). In addition, there were reports of redundancies, staff churn, and amalgamations before the roll-out date of the new system (Interview 6, 12), thus limiting opportunities for service providers to facilitate and offer services that give PWD the choice and control espoused in the policy.

The transport funding model, which is a capped allowance given directly to the PWD, has also created both challenges and opportunities for service providers. This approach may be seen to jeopardise existing service providers’ options because PWD may inadvertently exhaust their funds and thus, limit their ability to travel to service locations (Interview 10). However, there is the potential motivation for service providers to re-evaluate the needs of PWD and to be innovative in their offerings (Interview 10). The primary challenge of the new transport funding model which is specific to regional areas, is the cap, regardless of circumstances or geographical location (e.g., regional and remote areas in Western NSW Interview 1, 2). Respondents indicated that this was reflective of assumptions, about access to public transport, (e.g., Interview 1, 2) and the development of policy in urban centres with limited regard to the needs of the rural and remote regions (e.g., Dew et al. 2014).

Finally, the implementation of the NDIS requires PWD and carers to attend a planning meeting to discuss their funding needs. The design and delivery of this process requires PWD or their carers to be properly prepared to ensure they are appropriately funded (Interview 4). Preparing PWD was the responsibility of service providers. While motivated to facilitate this process and assist PWD, service providers interviewed early in the transition reported that being unfamiliar with the process limited their ability to assist (Interview 12), further the opportunity to assist was reduced as it was difficult to interpret the information available (Interview 5) especially with constantly changing goal posts (Interview 2). The importance of the role of service providers in preparing PWD was evident in reports of having to ensure vulnerable PWD were not “falling through the cracks” during the process (Interview 13). This manifested in reports of PWD throwing away contact letters and hanging up on assessors (Interview 10) leaving them vulnerable to not participating in a planning meeting and as a result not receiving the funding they needed.

**Conclusions and implications**

The absence of social marketing considerations in the design and delivery of the NDIS has impacted on the motivations, opportunities and abilities of midstream stakeholders in the reform. Specifically, the change in funding model is an environmental factor that changes the opportunities for service providers. Changes to the nature of funding can limits their ability, as illustrated in the change of transport funding. Further, the design and delivery of the planning meeting, means that funding and the subsequent opportunities are a function
of the PWD/carer’s capabilities in the meetings, leaving those with less capabilities vulnerable. Similarly those service providers with less abilities or motivations to change are at risk of not responding to the opportunities presented by market changes and therefore are at risk of going out of business. These challenges highlight the need for social marketing interventions to support regional service providers and participants in the ongoing delivery of the scheme.


Reference list


Examining the relationship between charity touchpoints and monetary support

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² Cathy Nguyen is a Research Fellow at the University of South Australia’s Business School and a Senior Marketing Scientist at the Ehrenberg-Bass Institute for Marketing Science. Cathy’s research focus is on advertising effectiveness and co-branding. Her interests also include cause-related/charity marketing and word of mouth behaviour and measurement. She has presented her research to industry and academic audiences throughout Australia, Asia, Europe and North America. Her research has been published in the Journal of Marketing Management, Marketing Letters, International Journal of Market Research and the Australasian Marketing Journal.

³ Leah McGeorge is a Marketing student at the University of South Australia’s Business School. Leah completed an 8-week summer vacation scholarship program, looking at extending marketing generalisations to a charity context.
Introduction/Background

Australian charities operate in a highly competitive sector, with over 55,000 charities registered nationwide (Australian Government, 2015). Charities compete for the support of individuals and branding plays an important role in attracting supporters (Bennett & Sargeant, 2005). Consumer-based brand equity concepts of brand awareness and brand image are also applicable to non-profit brands (Keller, Dato-on, & Shaw, 2010; Laidler-Kylander & Simonin, 2009). Improvements to the conceptualization and measurement of non-profit brand image is able to explain 51% of monetary donations and 54% of donations of time (Michaelidou, Micevski, & Cadogan, 2015). Whilst an important step forwards, the results show the need to research other factors that affect the level of support provided to charities.

Nenycz-Thiel, Romaniuk and Sharp (2016) highlight that being thought of is important, but not sufficient to being bought, as marketers also need to ensure their brands are easy to find and to buy. Reibstein and Farris (1995) discovered a strong positive relationship between a brand’s distribution points and the brand’s performance. Furthermore, a positive relationship is shown between the number of products offered and brand performance (Tanusondjaja, Nenycz-Thiel, Dawes, & Kennedy, 2018). Making a brand more convenient to buy and having a portfolio of products will increase a brand’s chances of being bought.

Information of support activities on charity websites make it easier for individuals to choose how they can provide support. As an example, at savethechildren.org.au, individuals can become a monthly giver or make a single donation, sponsor a child, leave a gift in their will, fundraise via event participation, identify volunteer opportunities that include supporting programs, events and op shops, buy products or sign a campaign petition. Whilst each new activity has the potential to increase support levels, the increase needs to cover management and resourcing. In the absence of published research, this study explores the relationship between the number of activities offered and the level of support achieved to provide guidance to charity marketers.

Support activities or ‘ways of engaging’ are referred to as ‘touch points’ throughout this paper and include any point of physical engagement with the charity, i.e. online or offline. The number and type of touch points offered is an important decision for charity marketers, as it is for all marketers. Within a charity context, we would expect the number of charity retail stores correlated with revenue from merchandise sales. Thus, we also hypothesise a relationship between the number of supporter touch points and funds raised from individuals: \( H1: \text{The number of touch points a charity implements has a positive relationship to the amount of monetary support they receive.} \)
Further, touch points can be classified as high or low involvement based on the level of engagement required, with low involvement behaviours providing an opportunity to introduce the charity’s mission (Peloza & Hassay, 2007) whilst also increasing its potential revenue and supporter base. It is also possible to classify touch points from the perspective of the benefits gained by supporters. Clark and Wilson’s (1961) conceptualisation of Social Exchange Theory classified exchanges with organisations as providing material, social or expressive benefits. For example, participating in events can provide social benefits for low involvement supporters but can also provide highly involved supporters a way to express their values, whilst purchasing products or lottery tickets provides material benefits. Given the different types of touch points available, we also investigate the prevalence of each type among different charities and how these relate to the amount of support that charities receive.

Method
To test our hypothesis, we undertook an online audit in January 2018 that examined the national website of a broad range of 40 charities operating in Australia. The largest 40 charities (based on revenue) were selected for the audit. The audit identified twenty commonly offered touch points, which we grouped into five types based on the behaviour and potential benefits for supporters (as per Peloza & Hassay, 2007). These comprise of A) Four forms of purchasing behaviours for material benefits: retail shops, raffle tickets, public services and training courses; B) Six forms of financial contributions for expressive benefits: monthly donations, workplace giving, bequests, one off donations, contributions to specific causes and in memoriam/celebration gifts C) Two types of donating goods or services for expressive benefits and/or material benefits from disposing of unwanted items: donating goods, in-kind donations D) Five types of active citizenship behaviour for social and/or expressive benefits: volunteering, donating blood, individual fundraising, major fundraising events, other events and E) Three citizenship behaviours where supporters connect with charities for expressive benefits: membership, signing petitions or downloading an app. In Australia all donations of blood are through Red Cross, reducing the number of touch points other charities can offer to 19. Using a binary code, we established how many of the touch points were offered by each charity. Every section of their website was analysed.

The Australian Charities and Not-for-profits Commission (Australian Government, 2015) provided the initial revenue data, with figures published in annual reports providing supplementary revenue data. Where available, 2017 figures were included, otherwise 2016 are reported. To calculate revenue from individual supporters, the government funding and grants were excluded from total revenue reported. Where information was provided, we also recorded revenue reported for individual touch points, including the amounts received from donated goods and donations in-kind, the sale of merchandise, services, memberships and revenue from fundraising events, donations, pledges and sponsorship. On checking revenue
figures, anomalies were shown between ACNC revenue figures and charity annual reports.

An example is the ACNC figure reporting substantially lower revenue for charities that operate as separate entities in each Australian state or territory, e.g. Guide Dogs and Cancer Council. In such situations, the researchers have used the annual reports as the data source.

*Results/Findings*

The number of charity touchpoints ranged from two (Our watch) to sixteen of a potential twenty touchpoints offered by the Red Cross, with 11 being the average number of touchpoints. The Red Cross raised the highest total revenue, however, once government funding and grants were removed, World Vision became the charity raising the most from individuals with 12 touch points. On average, charities audited offer 11 touch points, with Our Watch having the fewest (2). Contrary to expectations, the number of ways one can engage with a charity is not an indicator of amount of monetary support received (see Figure 1). The correlation between the total number of touch points for each charity and their overall revenue was 0.35. The number of touch points and the total monetary support given from individuals was 0.30. Many charities with a high number of touch points have low to medium monetary support from individuals. An example is Save the Children, who offers 15 touch points and receive around the same amount as Starlight Foundation with 10 touch points. Hence our hypothesis related to the overall number of touch points and revenue received from individuals is rejected.

We also examined whether the types of touch points offered is related to revenue, e.g. looking at the number of donation touch points and monetary donations. There are no systematic patterns shown between revenue and the presence or absence of touch points apart from retail outlets. The number of retail outlets (offline and online) is correlated (0.96) with merchandise sales. The relationship between the number of distribution outlets and sales discovered by Reibstein and Farris (1995) extends to the charity context as hypothesised.
Figure 1: Total Number of Touchpoints against Total Support from Individuals

Using one-way ANOVAs, we then explored the relationship between store numbers and revenue by grouping the number of stores for each charity as small (one store), medium (2 <100) or large, (>100). There is a significant main effect between merchandises revenue and medium and large (p=.02), as well as between small and large (p=.01) groupings. That is, charities with over 100 outlets receive more monetary support than charities with fewer than 100 outlets. However, no significant effect occurs between charities with one store and those with 2-100 stores, nor between the charity’s revenue from individuals or total revenue.

Discussion and Conclusion

This study provides an important first step to understanding charity touch points, creating a dataset of 20 distinct ways individuals engage with charities and examining the relationship between the number or type of touch points and monetary support. Our audit shows the complexity faced by charity marketers, with an average of 11 touch points to be managed that vary in terms of the behaviours involved and the potential benefits provided in return for support. Results show revenue is related to the number of charities’ retail outlets, extending prior findings on the relationship between outlet numbers and sales revenue. However, we find no evidence of a relationship between other touch points, or the number of ways charities provide for individuals to give support and the amount of monetary support given.

Our findings have immediate implications for charity marketers, i.e. adding another touch point has no guarantee of providing additional revenue. Hence, a well-intended decision could have detrimental effects for the charity’s ability to fulfil its mission. Results support the view Hogan, Almquist and Glynn (2005) and suggest for building commercial brands, i.e. that brands do not
need to focus on all touch points at once, but should identify those with the most potential to create a positive impact.

Examining stock-keeping units (SKUs) for brands in 15 packaged goods categories confirms some SKUs contribute more than others, with the top-selling SKU on average contributing 50% of the brand’s penetration and 40% of sales (Tanusondjaja et al., 2018). As some charities with a large number of touch points receive less revenue than others with just a few touch points, some charities could be spreading their recourses too thinly and consequently affecting the level of revenue gained from any touch point. Our study focused on the physical distribution of charity touch points and the results also highlight that other factors affect revenue. The successful execution of advertising and fundraising strategies is a likely explanation as to why charities, such as Compassion Australia, raise high levels of revenue despite having a relatively lower number of touch points. Romaniuk and Sharp (Romaniuk & Sharp) have shown empirically it is important for a brand to be easy to buy but it also needs to be thought of. We have begun work to understand how easy it is for supporters to engage with charities, but further research is required to understand the relationship between all marketing-mix variables and charity support.

Our analysis is limited to the data available at this point in time for the 40 selected charities. Further work is needed to broaden the analysis to more charities in Australia and overseas. Research is also suggested to examine how factors, such as type and age of charity affect the generation of touchpoints by charities and the level of support provided by individuals.

Availability of data, as well as data quality is an ongoing issue for researchers in this sector and led to limitations for our study. For example, Lifeline and World Vision have several outlets, but had no record of merchandise sales in their financial statements.


References


Trust, transparency and some tricky conversations – navigating a successful partnership for a private sector social marketing campaign

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Overview
Given social marketing’s altruistic aim – to change or maintain people’s behaviour for the benefit of individuals and society as a whole – there are varying perspectives regarding the involvement of commercial organisations in social marketing initiatives. However with a genuine desire to make a real difference to the communities they serve, and recognition of the importance of authenticity and ‘living your values’, private sector social marketing initiatives are becoming increasingly common. The innovative Do You See What I See? campaign provides a compelling example of a successful behaviour change campaign, run by SenateSHJ for Bayer Australia that was able to increase eye screening rates amongst Australians at greatest risk of diabetic eye disease. Following proof of concept via a pilot program however, there was a need to look at alternative funding models to expand the program. Sustainability remains an ongoing challenge for social marketers, regardless of the type of organisations involved. With this in mind, the following paper aims to provide insights into how a partnership with another commercial entity was brokered through trust, transparency and a few tricky conversations to ensure phase two of the DYSWIS campaign could go ahead.


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¹ Jodie Wrigley is a Partner at communications consultancy SenateSHJ and lecturer at the University of Sydney. She is a communication and behaviour change specialist and her passion lies in developing and driving strategic public education and social marketing campaigns. With a particular focus on health, Jodie has extensive experience in the areas of vaccination, eye health, smoking cessation and nutrition as well as preventative health and medical research.

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Paper Session: Transdisciplinary Research in Social Change

Session Chair:
Carina Roemer
How marketing may be used to increase the recruitment of Men in health research: A case study of the mensHealth Register in South Australia.

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1 Amy Wilson is a Research Associate and PhD candidate at the Ehrenberg-Bass Institute, University of South Australia. She has an Honours degree in Psychology, a research Masters in Marketing. Her research focuses on the use of marketing to understand and influence health behaviours with a particular focus on diet and physical activity. Amy has been involved in various academic and industry research projects across both health and marketing. She co-developed and co-coordinates a cross-disciplinary undergraduate course Marketing for Health and Wellbeing, which teaches students from health and marketing backgrounds how marketing concepts can be used to encourage engagement in healthier behaviours. Amy is a co-author of a Social Marketing chapter in Marketing, Theory Evidence and Practice, 2nd edition.

2 Nikki Harrison is in her third year of her Marketing and Communication degree at the University of South Australia. She completed a summer vacation scholarship with the Freemason’s Foundation Centre for Men’s Health, which investigated the role of marketing in male recruitment to health research. Her interests lie in the fields of social marketing, health promotion and digital marketing, and she is looking to complete a Masters by Research in the health marketing sector.

3 Camille Short is a behavioural scientist and research fellow at the Freemasons Foundation Centre for Men’s Health at the University of Adelaide. She has an Honours degree in Psychology and a PhD in Behavioural Medicine. Her research focuses on novel approaches to promoting and understanding health behaviours in at risk groups, with particular focus on e-&mHealth applications, persuasive and personalised communication. Her work is cross-disciplinary, incorporating evidence and theory from health, social and cognitive psychology, computer science, marketing, and public health. She has attracted over 1 million dollars in Research funding and currently holds a prestigious National Health and Medical Research Council Fellowship awarded by the Australian Government.
Introduction/Background
The underrepresentation of men in health research is evident in Australia, whereby men typically represent about 30% of the sample in health studies (Partridge et al., 2015).

Engaging young men is especially difficult, with opportunities to increase recruitment not well documented (Treweek et al., 2013). The mensHealth Register, an initiative of the Freemasons Foundation Centre for Men’s Health at the University of Adelaide, aimed to recruit 1000 men over six months, however they recruited only 157 males (a success rate of 15%). The low success rate may be attributed to a lack of consumer orientation (NSMC, 2010) and evidence-based marketing (Sharp, 2010) informing their promotion. Promotion raises awareness, informs and reminds potential registrants about the Register, therefore using effective promotional strategies is important. This study uses social marketing’s consumer orientation approach and insights from evidence-based advertising to provide recommendations for the Registers promotion. This study seeks to answer the question: **how can promotion be improved to increase recruitment to the mensHealth Register?**

Method
A consumer orientation approach (NSMC, 2010) was used to better understand the recruitment of men. Methods include (1) a literature search of journal articles using keywords: ‘market research’, ‘men’, ‘participation’, ‘recruitment’ and ‘social marketing’ and (2) and an analysis of the mensHealth Register promotional activity and survey data. From the literature search, key promotion strategies and their effectiveness were documented. From the Register, current promotional activity and data from the initial recruitment survey were analysed. Key components from an advertising brief (Sharp, 2017) were used to guide a critical analysis of the mensHealth Register promotional strategies.

Results/Findings
Fifteen studies from the literature, survey data for n=157 registrants and promotion activity of the Register were reviewed and analysed. Results are separated into five key components of an advertising brief. From these insights, recommendations for how to improve the promotion of the mensHealth Register, based on social marketing’s consumer orientated focus, and evidence-based advertising strategies are provided.

1) Understand the audience: The literature provides good consumer insights – common barriers to male participation in other health studies are time, masculinity, privacy concerns, environmental barriers, mistrust of outsiders, fear of commitment and lack of motivation (Kolnick and Mulder, 2007, Merritt and Turner, 2013). Whereas, motivators may come from males being driven by altruism (Kolnick and Mulder, 2007) and young males being more focused on short-term consequences and practical tasks (Reiter et al., 2017). To develop effective messages and creative for promotional activity, various messages and creative that addresses these barriers and motivators may be tested, through online surveys with current and potential registrants.
2) Know what should be included (information, branding, creative): Evidence from the literature suggests that men are more receptive to ads that feature multiple individuals (Reiter et al., 2017), while ads with a problem focus perform better than those framed positively (Choi et al., 2017). Currently the promotional material use: a logo, a tagline “we need Australian men to sign up to help us get the job done to advance men’s health” or “get it done”, an image of a middle-aged male, and a lot of text. It is recommended that 

a. logo continue to be used across all communications to build consumer’s awareness and memory for the Register, (2) the tagline be maintained but reducing it to “help us get the job done!” to make it problem focused, (3) images of groups of men of various ages be utilised to increase the relevance of the Register to a broader range of men, and (4) the text should be minimised as to not overwhelm people and to reduce ad avoidance (Cho and Cheon, 2004). These strategies inform promotion that can increase attention, improve relevance and therefore raise awareness of the Register (Sharp, 2010).

3) Choose the right media: While choosing the appropriate media is critical for effective promotion (Sharp, 2010), poor evaluation makes it difficult to determine which media has been effective for the Register – 51% of males heard via ‘media’ (all inclusive), which doesn’t indicate which media is working best, so the initial survey should be modified to find out via which media men hear about the Register via. Additionally, 15% were recruited through both community presentations and word of mouth, 13% through the workplace, 3% from a podcast and 2% were already involved in a research project. The literature suggests that social media recruited younger participants (Topolovec-Vranic and Natarajan, 2016, Frandsen et al., 2016) and online ads recruited a slightly higher percentage of 18-24 year old men (Graham et al., 2008). The current reach of the Registers promotion via social media is limited. The Freemasons Facebook only reaches 1,600 followers, whereas the University of Adelaide’s social media accounts reach 129,000 followers. To broaden reach, the Register should communicate more on University of Adelaide’s social media page, as well as other relevant pages. The literature also suggests that men prefer to be asked in person (Kolnick and Mulder, 2007), and word of mouth is an attractive source of promotion (Romaniuk and Sharp, 2016), so doctors should be educated about the Register and endorse it through brochures/posters at clinics.

4) Time your marketing carefully: The timing of marketing activity determines the audience and campaign reach (Sharp et al., 2012) whereby reduced marketing activity comes with a cost of memory decay (Romaniuk and Sharp, 2016). In the launching month of the mensHealth Register, 11 activities were undertaken to promote the Register, resulting in 52 recruitments. In the following months, marketing activities declined to zero activity in October. Subsequently, recruitment rates declined to only four in October. Promotion of the Register should have
consistent presence over various media, for longer periods of time to reach different people, who use different media at various times (Sharp, 2012).

5) Measure your marketing activity: Promotional activity should be evaluated to see what works and to identify opportunities for improvement. In the literature, tracking devices are used, which included evaluation of the opportunities to see, click through rates, expression of interest percentages, conversion rates and cost per click (Johnson et al., 2014, Partridge et al., 2015, Das et al., 2017). The Register has not implemented any measurement devices besides asking registrants how they heard of the Register upon signing up. We recommend tracking promotional activity to measure reach of their efforts, to inform where they should be focusing their promotion.

**Conclusion**

The absence of consumer orientation and advertising strategies may explain the lower than expected recruitment of men in health research. Using consumer research and evidence-based advertising strategies may increase recruitment, however research is required to test the effectiveness of our recommendations in the context of male recruitment in health research.


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Background
Agricultural pollutants exceeding environmental guidelines, such as pesticides, applied nutrients and sediments, continue to negatively impact water quality in reef catchment areas. The neighbouring World Heritage Listed Great Barrier Reef delivers pressing geographical challenges for project stakeholders who are tasked to change growing practices; which have evolved over a lifetime (Arklay, van Acker, & Hollander, 2018). According to the Scientific Consensus Statement (2017) current initiatives will not deliver the water quality targets. Calls for more a reflexive stance are apparent (Gordon & Gurrieri, 2014, p. 262). Evaluations have been challenged to move from a “prove” to “improve” mentality, given that learning from experiences helps to understand what improvements are needed to extend program success (McHugh & Domegan, 2017). By broadening focus beyond the individuals targeted for change to include within-project assessment involving all project stakeholders (Kennedy, 2017; Wymer, 2011) additional barriers may be identified.

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2 Professor Sharyn Rundle-Thiele is Director, Social Marketing @ Griffith (GBS) and Editor-in-Chief, Journal of Social Marketing. Drawing on her commercial marketing background Sharyn’s research focuses on applying marketing tools and techniques to change behaviour for the better. Research partners in 2018 include Defence Science and Technology Organisation, Australian Defence Force, Queensland Catholic Education Commission, Enhance Research, Department of Environment and Heritage Protection (Qld), Department of Health (Qld), and Redland City Council. Sharyn’s research is published in more than 120 books, book chapters and journal papers.
A significant change effort is currently underway in Queensland (Commonwealth of Australia, 2015). Diverse change efforts (Pickering, Hong, & Kealley, 2017) including targeted extension activities to improve water quality (Royle & DiBella, 2017), examining heterogeneity in practice adoption (Rolfe & Harvey, 2017) and understanding growth parameters and yield attributes (Singh, Verma, & Srivastava, 2017) are currently underway. Water quality scientists, marine scientists, agronomists and many more seek to inform and work with growers to support farming practice change. Change project stakeholders employ a range of personal and broadcast communication approaches (e.g. one to one and group meetings, events, newsletters, websites, booklets and more).

Effective communication is essential to convey messages (James, Estwick, & Bryant, 2014). The readability of written communication efforts (Carbone & Zoellner, 2012) is one (of many) barrier, which can be controlled by project stakeholders. Readability has mainly been addressed in health contexts with examples including drinking water quality (Siddhartha, et al., 2015), depression and anxiety (McHugh & Behar, 2009), and hepatitis B and C (Meillier, Patel, & Al-Osaimi, 2015). NIH recommends that health written communications be delivered at 6th and 7th levels (NIH, 2017). A review of the literature notes that all written communication materials assessed to date have exceeded recommended levels. Similarly, agricultural communication efforts directed towards sugar cane growers and graziers have been delivered at levels considered to be too complex for the general population to readily understand (Hay & Eagle, 2016). While different readability recommendations are evident (see Hay & Eagle, 2016 and NIH, 2017 who recommend Year 9 (Aus 14-15 years) and Year 6-7 (UK 10-12 years) respectively) it is clear that materials produced by agencies seeking to change behaviour are not meeting target audience needs.

Effective communication is audience-centred, targeting different segments to prompt behaviour change (Albrect & Bryant, 1996). Given that readability thresholds are known (Wang, Miller, Schmitt, & Wen, 2013; NIH, 2017) materials delivered by project stakeholders need to be delivered at or below recommended reading levels. This study examines the readability of available communication materials for project stakeholders involved in one regional growing practice change project. The following research question guides this study: *RQ1: Are written communication materials produced by project stakeholders a potential barrier for growing practice change?*


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Abstract
Cybersecurity has recently emerged as a contemporary challenge for organizations around the globe. Although firms and individuals are aware of the consequences of cyber-attacks, the endeavour to improve cyber-security compliance is often jeopardized by human behaviour in organisations. We recognize that embracing gamification in cyber security training can develop a sense of fun and active learning among employees. The paper introduces a gamified training approach in the context of security programs in organizations to overcome users’ resistance and ineffectiveness of traditional security training.

Introduction
The risks to an organization’s sensitive information are constantly changing and the loss of sensitive information continues to be a very real concern. Organisations often implement a wide range of security measures to ensure the security of their information and computer resources.

Information security (ISec) policies are guidelines and instructions that an employee should be aware and comply with to reduce information risks. A majority of organisational security problems are indirectly caused by employees who violate or neglect the ISec policies of their
organizations. To encourage security policy compliance (i.e. reducing internal security threats), organisations often introduce security training and disseminate potential security risks to system users. However, ISec training programs, which emphasise transferring knowledge and skills, are often ineffective (Adams & Makramalla, 2015). Training courses were ineffective because employees were passive, overwhelmed and found the training time consuming and ambiguous since they could not connect their learning experiences to real life situations. Furthermore, they are unable to comprehend the requisite cyber knowledge from a few training hours (Cone et al., 2007; Nagarajan et al., 2012).

This paper aims to propose a gamification approach in ISec training which can generate intrinsic motivation (enjoyment and interest) as part of a behavioural infrastructure based on internal social marketing (ISM) to sustain adequate security compliance.

**Internal Social Marketing and Security Behaviour Change**

As defined by the British National Social Marketing Centre (NSMC), social marketing (SM) is ‘an approach used to develop activities aimed at changing or maintaining people’s behaviour for the benefit of individuals and society as a whole’ (Hopwood and Merritt, 2011). ISM is the use of social marketing within organizational contexts to align, motivate, and coordinate employee behaviours (Rafiq and Ahmed, 2000). It has shown a certain level of impact on driving the desired behaviours of internal stakeholders, notably in increasing pro-environmental behaviour, health-related behaviour, and service quality (Brennan et al., 2015, Russell-Bennett et al., 2013, Smith and O’Sullivan, 2012).

ISM has a role to play in decreasing user risks by providing a framework by which organisations can apply social marketing principles to an internal behaviour change scenario (Russell-Bennett et al., 2013). Successful behaviour change requires that people are not only motivated and capable of initiating a change in their behaviour, but also able to sustain that change over time (i.e. to be self-motivated to undertake the behaviour). Intrinsic motivation (enjoyment and interest) will motivate and maintain self-regulation. External factors such as punishment or reward which introject motivation are not self-sustaining (e.g. Ryan and Deci, 2000). To secure ISec environment, it is ideal that all employees actively undertake behaviour in accordance with IT policy in order to protect information assets. Ongoing personal efforts to actively monitor, evaluate and react to security risks are essential to an effective ISec program. The role of ISM is to create the interactions between participants in the security system that enable co-creation of security compliance to take place. Hence, a new way of approaching high-risk contexts such as ISec is both important and urgent. To this end, we propose that security training can be positively transformed using gamification principles – adding interaction and enjoyment to increase engagement in ISec activities.

**Gamification for Cybersecurity Training**

Traditional training techniques (like lectures, newsletters, presentation, instructor led, and classrooms) are insufficient for the context of IT training (Bowen et al., 2012). This is because the learners have few chances to see the serious consequence of breaching rule
actions or bad security behaviour, as well as the effect of applying the security principles studying from the training in a realistic environment (Willems and Meinel, 2012). It is obvious that a short session of acquiring information about security topics such as why this is important, and tell people should change behaviour without hand-on experiences are ineffective. Eventually, many security trainings span over a period of time such as twice a year. These make ISec trainings little or short-lived impacts while cyber security needs regular and sustained compliance. Undoubtedly, IT training should be “a continuous process with a continuous life cycle where users must be trained updated and reinforced periodically” (Nagarajan et al., 2012).

User engagement is another challenge in ISec training. These traditional approaches are less effective because learners are not engaged in learning process (Adams and Makramalla, 2015). This is caused by not employing an interactive approach with the learners, and let them passive to the studying. The problem of employee not engagement also found in another training approach. Furthermore, the ISec training via the stimulation involving the primary tasks daily of users may annoy them. For example, users in anti-phishing emails studies may feel uncomfortable, and complain about the receiving phishing emails when they are working. Due to the heavy load of daily works, they seem not be ready for ISec training.

Gamification can be the answer for these security training gaps to improve the employee engagement. The main idea is applying/using game elements, game mechanics, or game thinking to the context of security training. According to Kapp (2012) “Gamification is using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems”. Game-based training can offer employees a visual and stimulate environment to practice their skills in the real situations, which cannot exist in the traditional training methods (Forbes, 2017). Therefore, they can understand better and deeply the nature of security knowledge and skills, as well as, the negative effects of non-compliance. In addition, gamification can make security training more interesting and enjoyment, therefore, more engaging to users via applying game elements such as badges, points, levels, leader boards, awards, and storytelling (Baxter et al., 2016, Amorim et al., 2013). Therefore, gamification approaches enable the creation of an active and collaborative working environment with higher motivation and enthusiasm leading to better performance of employees (Burke, 2016).

At the conference, the authors will present initial findings on the gap in communication methods between organizations and their employees and demonstrate how gamified training can enhance ISec engagement from employees.

**Conclusion**

The paper presents a gamification method as a solution for increasing interactive, active learning and creating higher learning motivations, which enable employees to be more interested, excited and adopt new security knowledge and skills more efficiently in
comparison to the traditional passive computer-based training on ISec (Jordan et al., 2011; Adams & Makramalla, 2015).

By developing security training games, which are realistic and have been built from a sense of fun, both monetary and non-monetary rewards like external controllers, gamification is able to provide IM, which is more effective for continuity of the desired behaviours. Furthermore, gamification also creates a highly enthusiastic atmosphere among employees. For example, concrete experience is provided through playing games which then lead players to solve problems by using their critical thinking to familiarise security domain-specific concepts’ (Cone et al., 2007). Interactive computer-based training such as video games in training therefore can positively influence the engagement of employees and becomes a more powerful teaching tool than the traditional passive computer-based training program.


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Virtual Session: Advancing theory in social marketing

Session Chair:

Rachel Hay

Presenters in the virtual session used Zoom to present their paper live. The audience was able to ask questions and provide feedback at the end of the presentation.
Promoting Educational Futures: The importance of culture

Professor Valerie Harwood¹ and Ms Nyssa Murray²

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Introduction/Background
This presentation takes up the issue of implementing social marketing techniques to develop new approaches to the promotion of education. This work engages with the recent scholarship in social marketing that has sought to think through interdisciplinary connections with the critical social sciences as well as with the new work arguing for decolonizing approaches in social marketing research with Aboriginal people (Judith, Libbie, Karine, Robb, & Celine, 2014). Recent scholarship in social marketing includes the work on social countermarketing by Bellow, Bauman, Freeman & Kite (2017) and the insightful analysis by Gordon, Russell- Bennett & Lefebvre (2016) that makes the case for the importance of interdisciplinary efforts that engage understandings from ethnography (Brennan, Fry, & Previte, 2015) to considerations informed by political philosophy. This paper describes how social marketing can be employed together with critical practices that engage with the substantive issues that contribute to the production of inequality. The paper reports on how, by paying close attention to considerations of culture and relationships with Aboriginal people, social marketing was used in the Lead My Learning campaign to address issues of widening participation. This involved using cultural and social marketing approaches, ‘from the ground up’ (Murray & Harwood, 2016). Theoretical and practical concepts will be explained using the authors’ research with parents of young children - parents who themselves have had difficult experiences with school

¹ Valerie is an Australia Research Council Future Fellow. She specializes in research on disadvantage and educational inclusion drawing from the disciplines of sociology and anthropology of education and cultural studies of education. She has international research experience on educational exclusion and inclusion, with work conducted in the UK, US and Australia and has a number of publications that engage with Foucault and political theory (eg. Hannah Arendt) to analyse educational exclusion.

² Nyssa is a Dunghutti woman who has considerable experience in national and regional strategic management roles that focused on the inclusion of Aboriginal Australian people within education and employment. She is the Project Manager for ‘Getting an early start to aspirations: Understanding how to promote higher education in early chidhood’. Nyssa is a PhD candidate in the Faculty of Business, University of Wollongong.
education and who, while valuing education, are not connecting with education and educational futures in ways that are most effective for their children. The presentation will include detailed and accessible explanations of the research created for the Lead My Learning campaign (www.leadmylearning.com.au).

**Conceptual Model/Proposal**

There are very few adaptations of methodologies such as social marketing for use in the complex cultural and social landscape of educational disadvantage (Truong, 2014). There are however a number of studies that are drawing on approaches such as ethnography (Brennan et al., 2015; Cullen, Matthews, & Teske, 2008) and that are using sociological conceptual work such as cultural capital (Kamin & Anker, 2014). At the same time scholars have drawn on the critical social sciences to question the motives of social marketing, for instance, the Foucauldian critiques of social marketing as forms of biopolitical governance (Crawshaw, 2012; Pykett, Jones, Welsh, & Whitehead, 2014). Taking heed of this literature, the presentation proposes that while social science theories such as the work on governmentality by Foucault (1991, 2000) can inform the critique of social marketing, these can also assist in building critical approaches that enable productive discourse techniques that can disrupt dominant deficit views. This paper suggests that access and participation to educational futures – and opportunities for higher education, can benefit from such new approaches to promoting educational futures. The presentation will argue that efforts to widen participation in higher education will benefit from innovative, engaging and respectful ways of communicating with parents and families that promote education and learning – and that social marketing approaches that are informed by critical and cultural understandings have a valuable role to contribute to this effort.

**Implications for theory**

This presentation will discuss the importance of a critical cultural emphasis in social marketing work that seeks to address the complex problems of disadvantage (Wolff & De- Shalit, 2007). This will include discussion of respectful ways for collaborating with Aboriginal people and the importance of thinking critically about ‘the cultural’ in learning and be mindful of approaches such as LOPI (Learning by Observing and Pitching In) (Correa-Chevaz, Mejia-Arauiz, & Rogoff, 2015; Rogoff, 2014). To date there is little published work on social marketing approaches with Aboriginal people (Madill, Wallace, Goneau-Lessard, Stuart MacDonald, & Dion, 2014).

Lead My Learning is a new approach that builds on the discipline of social marketing, adapting the focus on how ‘problems’ are conceptualized (to extend beyond behavior based) and how culturally respectful and critically informed collaborations can push boundaries beyond the trichotomy of ‘downstream-midstream-upstream’ (Brennan, Previte, & Fry, 2016; Hoek & Jones, 2011). This has enabled us to create a critically informed approach for use in the promotion of educational futures in communities and places where there is significant educational disadvantage. This emphasis is significant because it clearly focuses thinking onto the cultural considerations for understanding educational disadvantages – and at the same time, draws on the rich tradition of critical work in the social sciences (eg Butler, 2004; Foucault, 1997; Harwood & Rasmussen, 2013; McRobbie, 1980).
**Implications for practice**

At the heart of modern institutional schooling is an unacknowledged assumption – that education does not need promoting. Yet there are many who feel disconnected from schooling and many for whom higher education is an unknown or felt to be impossible (Harwood, Hickey-Moody, McMahon and O’Shea, 2017). Even with the considerable effort made in many countries across the world to widen participation in university education, little is known about how to promote educational futures.

Emphasis on the critical and the cultural (together with the social in social marketing) is important for two reasons. Firstly, it forces us to critically engage with and better understand ‘problems’ such as low participation in schooling and higher education. This supports improved understandings of the complexity of problems and can effectively work to disrupt deficit explanations of experiences such as ‘failure’ or ‘leaving school early’ or ‘dropouts’. This is significant as it enabled us to look at how ‘problems’ and ‘problem subjects’ are produced – and understand the extent to which parents valued education – and how they were perceived by ‘authorities’ in a system that disenfranchises them. Secondly, with this new edge to understanding the complexity of how these problems are produced, novel approaches can be developed. Such approaches can cleverly and respectfully contribute to addressing some of the barriers that prevent access, participation and retention in higher education. For example, deeper appreciation of the cultural and social barriers that impact people’s feelings toward schooling and education can enable better informed and more collaborative designs and innovations for promoting parental engagement and participation in their children’s learning.


**References**


Session Chair:
Sharyn Rundle-Thiele

Mehmet (Michael) Mehmet
Can serious games reduce excessive drinking intentions among Australian secondary school students?

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Abstract
Alcohol is one of three major causes of death in adolescents. This paper reports a program designed using gamification theory and targeted at Australian secondary schools to address the gap of incorporating serious gaming into the context of alcohol education, aiming to investigate the effect of Blurred Minds analysing the effect of three online games on reducing adolescents’ intention to binge drink. A repeated measure design was employed and a total of 313 samples were collected. Using paired sample t-tests and path analysis, this paper found that using three different types of serious games, changes for four out of six psychological factors were associated with game play. This study also provides evidence suggesting that incorporating interactivity and engagement using serious gaming design into an alcohol program delivered in school settings can influence psychological factors, some of which will then in turn change behavioural intentions.

Abstract
Health promotion campaigns using social media have emerged as a potential way to change behaviour in a large, diverse group of people. However, successfully connecting with and engaging the target audience is still a key challenge faced by health professionals and social marketers. This paper proposes the use of co-creation and co-design processes in order to engage young people in social media interventions. This method involves a "Wicked Problems" studio (5-day workshops), where young adults (university students) across multi-disciplinary areas and a variety of stakeholders (ie. health organisations, government bodies, academics etc) collaborate to problem-solve. This process is outlined in the paper and the outcomes of the "Wicked Problems" studio will be presented during the conference. With this proposed method of co-creation and co-design, we hope to achieve a deeper
understanding of effective health messages and content creation for social media platforms designed to connect with young adults.

Outcome evaluation of an empirical study: Consumer insight driven food waste social marketing pilot

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\(^1\) Jeawon Kim is a PhD Candidate, Social Marketing @ Griffith (GBS) and Waste Not Want Not campaign assistant with experience in formative research and design, management, implementation, and evaluation of social marketing programs. She holds a Bachelor of Business (1\(^{\text{st}}\) class Honours) and a Psychological Science degree. Jeawon’s research focus is on sustainability behaviours including leftover food reuse, reducing food waste, and increasing effective waste reduction behaviour from a social marketing perspective. Jeawon aims to challenge practice through scientific discovery.

\(^2\) Dr Kathy Knox, Ph.D., is a research psychologist with expertise in human development, attitude and health behaviour change across a range of settings. Kathy is a member of the Menzies Health Institute Queensland and Research Fellow with Social Marketing @ Griffith leading a rapidly developing program of empirical research on social behaviour change. Kathy’s research focus is on communities and sustainability behaviours including health education and communication, reducing food waste and excess water use, increasing recycling and organ donation. Kathy has direct experience in designing and conducting community-based interventions and has evaluated local and national interventions to change awareness, knowledge and cultures of behaviour.

\(^3\) In 2017 Sam Hodgkins, was an Honours Candidate, Social Marketing @ Griffith (GBS). Sam worked in design, management, implementation and evaluation as a program assistant in the recent Waste Not Want Not campaign. Sam’s research focussed on stakeholder involvement with social marketing interventions. He is supervised by Professor Sharyn Rundle-Thiele and Dr Kathy Knox (Department of Marketing, Griffith University).

\(^4\) Professor Sharyn Rundle-Thiele is Director, Social Marketing @ Griffith (GBS) and Editor-in-Chief, Journal of Social Marketing. Drawing on her commercial marketing background Sharyn’s research focuses on applying marketing tools and techniques to change behaviour for the better. Research partners in 2018 include Defence Science and Technology Organisation, Australian Defence Force, Queensland Catholic Education Commission, Enhance Research, Department of Environment and Heritage Protection (Qld), Department of Health (Qld), and Redland City Council. Sharyn’s research is published in more than 120 books, book chapters and journal papers.
**Introduction/Background**

In 2014-15, 6.3 mega-tonnes of organic waste was disposed of in Australia (Australian Bureau of Statistics, 2016). In accordance with increasing food waste in Australia, the potential for environmental and public health risks has increased over time, threatening Australia’s ecosystem, and contaminating domestic sewage (Australian Bureau of Statistics, 2013, 2016). However, few programs have been implemented in Australia and globally to reduce food waste and application of social marketing is limited (Barr, Gilg, & Shaw, 2011). Consequently, the mechanisms to reducing food waste are not yet clear. The complexity of reducing food waste needs to be considered. A broad array of behaviours can be targeted to successfully reduce food waste (Bench, Woodard, Harder, & Stantzos, 2005; Farr-Wharton, Foth, & Choi, 2014; Read, Gregory, & Phillips, 2009; Rousta, Bolton, Lundin, & Dahlen, 2015). Thus, the need to verify each behaviour represents an important first step given lack of evidence available globally (Barr et al., 2011). To fully apply social marketing to food waste reduction, application of co-design, which centers program design on the target audience is warranted (Andreasen, 2002; National Social Marketing Centre, 2017). This paper reports how co-design (see Dietrich, Trischler, Schuster & Rundle-Thiele, 2017 for a full explanation of a six-step co-design process) was employed to identify potential strategies, one of which was used to design and implement a social marketing program. The outcome of the program is examined to understand if a co-designed social marketing can be employed to reduce food waste, focusing research attention on one food waste behaviour.

**Method**

A co-design process (see Dietrich et al., 2017) was adopted in this study. First, a systematic literature review (SLR) was undertaken in the planning stage to locate effective food waste reduction programs. Two co-design sessions involving a total of 21 participants were recruited through university and council networks (Stage 2 of co-design) for the co-design study. Sensitizing activities, namely word association, sentence completion and group discussion on the 9 programs located in the SLR were used to engage co-design participants into the design process. Next, co-design participants were grouped into teams of 3-4 people. Each group was provided with pens, coloured markers, post it notes and butcher paper. The teams were asked to build a food waste program that would effectively engage them to reduce food waste. At the end of the co-design session participants were asked to pitch their idea to a member of the research team. Findings indicated that programs which promoted composting and/or food left over re-use could be used to effectively engage people to reduce food waste. Based on the co-design findings and further surveys to understand which foods were commonly found in fridges for residents to be targeted, a program was developed to tackle leftover fruit and vegetable reuse behavior. **Waste Not Want Not** was delivered in South East Queensland early in 2017. This two-week program featured development and distribution of 16 leftover-reuse recipes, daily cooking demonstrations, and a Chef Cook Off event hosted within a local shopping centre in the council area.
A repeated measure design was used to evaluate outcomes and assess the effectiveness of the program in changing households’ self-efficacy and the proportion of wasted fruit and vegetables thrown away. Two groups were surveyed before and after the program: intervention who received a pack \( (n = 91) \) and control households \( (n = 153) \). Control group participants completing both studies were offered the chance to win one of ten $50 retail vouchers. Data were gathered using a computer assisted telephone survey. Validated scales were used to assess self-efficacy (Bandura, 1977), and fruit and vegetable waste (Waste and Resources Action Programme, 2007, 2010). The internal consistency for the eight item self-efficacy scale (Cronbach’s alpha) was 0.83. For example, self-efficacy items measured the participant’s level of confidence in planning meals, reusing leftover food, and transforming leftovers into a different dish.

**Results/Findings**

All study participants resided within the local council area. Almost 45 percent were aged between 35 to 49 years old. Two hundred and forty-four out of the 314 participants completing the baseline study also completed the post survey, representing a response rate of 75 percent.

An independent samples \( t \)-test was used to assess group (intervention versus control) differences in the sample at baseline. No significant differences were observed in self-efficacy between the intervention group \( (M = 5.6, SD = 0.9) \) and control group \( (M = 5.6, SD = 1.0) \); \( t(312) = -0.33, p = .739 \). Paired-samples \( t \)-tests were used to compare self-efficacy over time within each group. A statistically significant increase in cooking self-efficacy was observed in the intervention group, \( p = .039 \). At follow-up self-efficacy was higher \( (M = 5.8, SD = 0.9) \) than at baseline. No statistically significant difference was observed in the control group \( (p = 0.343) \). Further, the survey results indicated that FW delivered behavioural change in the targeted area. The proportion of respondents reporting throwing hardly any fruit and vegetables out in the target group \( (n = 110) \) increased from baseline (44.5%) to 62.6 per cent after the intervention, \( p < .001 \). No statistically significant change was observed in the control group \( (n = 204) \): 52.5 per cent pre and 56.9 per cent post \( (p = .148) \).

**Discussion and conclusion**

The outcome evaluation of FW provides evidence suggesting that a consumer-oriented program can deliver behavioural change. By offering a controlled repeated measure assessment of a food waste program, which aimed to increase self-efficacy in cooking, the importance of a bottom-up, consumer insight driven approach in social marketing practice is outlined.

The FW program focused on building cooking self-efficacy encouraged leftover fruit and vegetable reuse behavior. This study provides empirical data to verify the role of self-efficacy in reducing fruit and vegetable waste (Bandura, 1977; Lyndhurst, 2007). In the context of food waste, self-efficacy is a theoretically based precursor of behavior change (Fishbein & Ajzen, 1976). Current findings add to evidence that self-efficacy and confidence...
in one’s cooking skills is associated with willingness to cook (Sobal & Bisogni, 2009) and the level of food consumption and food-purchasing behaviour (Winkler & Turrell, 2010). The consumer-insight driven program resulted in significant increases in self-efficacy for the intervention group, but not the control group, and thus, resulted in fruit and vegetable waste reduction. The role of self-efficacy is consistent with prior literature which indicates that inventories and purchase of food already existing can be decreased with planning processes (Bell, Corsten, & Knox, 2011), thus potentially resulting in increased leftover reuse routines (Chandon & Wansink, 2006) and reduced food waste.

This paper contributes to validating the efficacy of a six-step co-design framework, demonstrating how this approach can be applied to develop an effective environmental waste program. This paper outlines successful translation of co-design outcomes into a community change program, which successfully achieved its aim of reducing food waste. A limitation of self-reported data, which has known biases of social desirability (Gram, 2010) is noted. Future research could employ observational techniques to objectively verify behavioural outcomes. A broader system focus considering environmental and social factors in household food waste processes is recommended for future social marketing programs.


References


Applying a Systems Lens to Defence Evaluations

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Abstract
Most products or services undergo some form of market research; this research enables understanding of areas to focus on during development and launch of new products and services. A recognised gap within such research relates to heuristics and biases present in individual decision making processes. Heuristics and biases pose a challenge for Australian Army user evaluations as these factors can influence and distort responses obtained from soldiers; providing false user reads. If taken forward to inform procurement decisions, reliance on false reads could result in poor product adoption, satisfaction or acceptance rates among soldiers when these products are issued. This paper explores whether a systems thinking lens can be applied to examine a user evaluation process. Two lenses are applied to examine an Australian Army user evaluation: 1) Taking a transactional, dyadic stance, a survey used within the evaluation was assessed for potential sources of bias and 2) a wider systems view applied to determine if additional effects impacting user evaluations could be observed while examining an Australian Army user evaluation. Systems thinking may provide an approach to examining Australian Army equipment user evaluations; by extending examination beyond a single dyadic transaction occurring within a larger evaluation process.

Keywords: systems thinking, heuristics, bias, decision making

Sharks, Social Sentiment and Science

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This article is positioned within critical and strategic social marketing literature (Andreasen, 1995; Goldberg, 1995; Gordon, 2011, 2013; Gordon, Moodie, Eadie, & Hastings, 2010), which asserts the importance of conducting community-based research to gain insights that assist in strategic social program design (Andreasen, 2002; French & Gordon, 2015). Campaign design failures associated with ‘top down’ or ‘expert led’ approaches, have been linked to poor in-depth community research (French & Gordon, 2015, p.13). The policy design/implementation of New South Wales shark management strategy has been an example of a top down, expert driven implementation design strategy. The aim of this research is to demonstrate how a multi-method research design may assist in enhancing social program design and better inform policy makers, with the ultimate aim of a reduction in public risks of unprovoked shark encounters.

Background
In the period 2014-2016 the state of New South Wales (NSW) experienced a succession of fatal and non-fatal shark encounters along the northern coastline. Under pressure to design effective shark management policy (Friedrich, Jefferson, & Glegg, 2014; McCagh, Sneddon, & Blache, 2015) the NSW state government held a shark symposium in Sydney. It hosted shark experts and key stakeholders from around the globe, with no community representation or consultation, and then

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announced a five year, $AU16 million shark management strategy (SMS) (Pavey, 2016). The SMS was designed to mitigate the risk of shark encounters and improve the scientific understanding of sharks and shark encounters through humane and ecological practices (Pavey, 2016). The strategy considered a variety of elements, including new drones, helicopters, clever buoys, shark barriers, social media applications, education programs and smart drumlines (Pavey, 2016).

To better conceptualize the issue of shark encounters and mitigation solutions, NSW State (Pavey, 2016) and Federal governments (Whish-Wilson, 2017) both organized committees to explore this issue. Each report confirmed attitudes toward shark policy and implementation are complex, with community members expressing a variety of underlying reasons for approving or disapproving of particular policy and mitigation approaches. The Department of Primary Industries (DPI) Fishers also initiated a policy that required ecological, social and environmental impacts for each strategy to be assessed. This meant the SMS required a comprehensive exploration of community attitudes with regards to SMS and its implementation. Importantly, a considerable shift in policy was announced in October 2016, where the Premier of NSW committed to a mesh net trial for Ballina (DPI, 2017). This caused community outcry (during our study) and reinforced the need for community consultation.

Discussion of the issue
Consultation came in the form of a pre and post net trial online survey run by the Department of Primary Industries, Fishers (Department of Primary Industries, 2017). The limited nature of the survey and specific geographic focus did not allow for a deep understanding of the NSW beach and ocean user community. A problem with this approach according to Macnamara (2016) is that you only hear from the ‘usual suspects’, those highly affected or motivated, and the voice of the general community is not heard. To further their community understanding the DPI Fishers wished to explore other methods of community ‘listening’, to capture the attitudes related to sharks and the SMS of those considered ‘grass roots’ beach and ocean users. This paper describes the research project conducted in partnership with DPI Fishers.

Practical and Conceptual Implications
The mix of methods included (1) focus groups/interviews – 14 in total ranging the entire length of the state; and (2) Sentiment analysis, which consists of exploring publicly available natural language in social media comments (Barry, 2014). Over 21200 Facebook and 17000 Twitter comments were analyzed.

Step 1: Locating data and familiarisation with socio-cultural context - Netnography is ethnography adapted to the study of online communities (Kozinets, 2002). (Kozinets, 2015) argues that the approach provides a means of research that is quicker, and less costly than traditional approaches. Further, it permits the exploration of natural language unbiased by the researchers. Importantly, it was used in this study to immerse the researcher in the online community’s discussion of sharks and the SMS, as well social conventions, symbolisms, and meanings related to groups, shaped by affordances embedded in each social media site.
Step 2: Scope and data collection – Parameters of the study were established and appropriate data was collected. Geographic (NSW) boundaries were set, with a timeframe coinciding with the introduction of the first stage of the SMS.

Step 3: Data familiarisation and cleansing – This involved all authors reading and establishing an understanding of the data in relation to the scope of the study. Data that fit the scope was included, data outside set boundaries was discarded. In this instance data related directly to each SMS, and community views on sharks and preferred coexistence approaches. Importantly, steps 2 and 3 were applied multiple times as familiarity helps inform scope. This meant that surrounding themes could assist in explaining motivations and reasoning for attitudes and positions.

Step 4 Code development - The approach of Abductive reasoning (Walton, 2014) was employed to generate themes that accounted for the volume of data (social media and the interview/focus group transcripts). Themes developed in the social media analysis could be checked with the data from interview/focus groups, and vice versa. This forms an abductive multi-method design where both sets of results are compared if possible. The results from each method at times support the other; this is illustrated using grey and white arrows in Figure 1. In short, this study used sentiment analysis to explore community attitudes, help contextual framing and develop thematic codes, and assisted in framing and shaping focus group questions and areas of focus.

Step 5: Collaborative coding - Attitudes were assessed using Appraisal theory (Martin & White, 2005). Appraisal asserts opinions are segmented in affect, judgement and appreciation. Affect level analysis focus on emotions, accounts for un/happiness in/security and dis/satisfaction (Martin and White, 2005). Judgement analysis expressions related to how ab/normal, in/capable, un/dependable, un/trustworthy or im/moral a person, group, event or circumstance is perceived (Martin and White, 2005). Appreciation account for a person reaction, either positive or negative to a persons, event or circumstance; how well they perceived someone/something is composed and how in/valuable someone or something is in relation to an alternative (Martin and White, 2005).

Importantly, all data was collaboratively coded in accordance with Saldaña (2015), meaning both researchers reviewed and agreed on coding through a negotiated process. This process occurred three times throughout the process, first, when the social data was collected and parameters were being set. Second through the cleansing and thematic stages. Third when applying appraisal coding to sentiment data and focus groups. The third stage was repeated, with insights gained from social data applied to focus group data, and back to social data for purposes of consistency.

The implications of this study for social marketing theory and concepts are two-fold. Any theory of listening should not solely rely on a single method of community attitude exploration (Macnamara 2016). Using sentiment analysis with appraisal in assessing community attitudes provides a framework for understanding what people are feeling and why, and it assists in shaping additional approaches.
**Lessons Learned and Recommendations**

Appraisal did not account for three emotions important to the context of this study, hope, despair and hostility, which were clearly expressed often online and in focus groups. These were added to our coding schedule to provide a more accurate and nuanced understanding of attitudes. We recommend that further projects tailor appraisal to suit particular contexts under study using Plutchik's (2001) wheel of emotion.

Importantly, using both research methods in parallel resulted in four advantages. First, conducting the cleansing process and familiarizing ourselves with the sentiment insights provided appropriate language to engage with participants in extended (focus group) discussions. This facilitated a targeted exploration of attitudes, associations and reasoning about the SMS and related topics. Second, sentiment analysis highlighted particular areas of contention and areas that were not well commented on in the social spaces; this guided some lines of inquiry for the focus group and interviews. Third, the method enhanced interpretation through the coding and analysis process, after the focus groups/interviews were completed. Finally, once the focus groups and interviews were complete, abduction was used to better inform analysis of the sentiment data. This meant the thematic analysis and coding was more nuanced and accurate, providing deeper and richer insights from the key target groups of interest to the DPI fishers.

It is the recommendation of this study that researchers exploring community attitudes and reasoning use compatible research methodologies in parallel, as insights from both can help inform each other. Further, collaborating coding bonds a research group (Saldana 2015) and improves inter-coder consistency. Importantly, it provides the research with a consistent lens for assessing and comparing different stages, and in doing so creates nuanced and rich insights.


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Paper Session: Transformative Services and Midstream Social Marketing

Session Chair:
Carolyn Loton
What Role can Social Marketing Approach play to Improve Building Users Wellness? A Review and Discussion

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Introduction
In modern society, people spent about 80% to 90% of their time in building, an inappropriate building design and usage will post potential threat to the occupant’s physical well-being. There is overwhelming evidence stated that unhealthy environment in a building has contributed to occupant’s health problems, including breathe problem, tiredness and sleep disturbance. The building user wellness has been a matter of concern among the building operator, for it will greatly affect towards the effectiveness of an organization in long run. Conventionally, in Malaysia, the building operator depends on the tools such as Green Building Index (GBI) and Post Occupancy Evaluation (POE) in enhancing the building user wellness, this study intends to suggest social marketing approach as a complementary tool to improve occupant’s wellness. Previously, social marketing approach has been used effectively in promoting global health, the justification of using the social marketing approach in building user wellness will be discussed in this paper.

Building User Wellness
Generally, building represent the largest capital investment made by any society. However, many buildings had been reported failed to live up to their potential level including to provide healthy indoor environment for the occupant wellness (Altomonte and Schiavon, 2013). As mentioned by

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Feige et al., (2013), occupant wellness and productivity are significant consideration for a businesses as it typically cost about 50% to 80% of the budget. In the past few years, the health status of building user was declined as 40% reporting psychological distress, 70% reporting moderate to high stress level and 60% reporting being physically inactive (Robinson et al., 2014) hence the significant of health improvement in buildings were documented in several literatures. According to study by Lai and Yik (2007), the psychological factors or users control over the environment were important to improve the comfort level of indoor environment.

Building user often demand to have priority in terms of quality of indoor environment. If the conditions inside the buildings do not fulfil their satisfaction, people will behave in ways with tendency to restore their comfort. This principle implies that they will do corrective actions, including the use of building controls which they think will enhance their tranquillity (Daghigh, 2015). The World Health Organization (WHO) stated that essential determinant of healthy life and people’s well-being is based on the quality of indoor environment inside homes, school, and other private and public building. For instance, study by Alyami and Rezgui (2012) had stated that indoor environment quality is a popular theme in all assessment schemes as it is related to increase health and safety among building users. Mahbob et al., (2011) also mentioned that poor indoor air quality will affect individual well-being which lead to increasing of sick leave, complaints, risk of accident and mistakes. Consistent with study by Mendell et al., (2013) which claimed poor indoor environment quality in school has result illness, adverse healthy symptoms and reduce performance among the students.

In Malaysia, study by Choo and Jalaludin (2015) reported that majority of school building have poor quality of indoor air due to insufficient ventilation and inadequate maintenance hence causing discomfort and short to long term respiratory health problem among the school children. Furthermore, study by Khalil et al., (2011) stated that rapid development of higher institutional building in Malaysia which is normally located in the sub-urban and city area had incorporates with the issues of cleanliness, noise and air pollution. In addition, study Sarijuddin et al., (2017) on kindergartens in Malaysia found that activities inside the building such as cooking, cleaning, poor ventilation were the cause of poor indoor air quality and the increase of respiratory health problems among children.

Driven by environmental needs, Green Building Index (GBI) and Post Occupancy-Evaluation (POE) are among the common approach to promote building user wellness in Malaysia. POE systematically analyze a building environment to gain understanding regarding the impact towards occupant and its environment. Several case studies presented by Zagreus et al., (2004) stated that information provided by POE can positively influence occupant towards better indoor environment in a building. Meanwhile, GBI is envisioned to promote sustainability of built environment and enhance awareness among stakeholder and building user about environmental issues. Various researcher believed that green buildings have been shaped to lower the impact on the environment and improve the health quality of the building occupants (Woo, 2010). It is important to point out that the quality of indoor environment, besides due to the design of the building, it is caused by the
usage and operational practices among the building user. Therefore, the occupant behaviour can be targeted to improve the quality of building environment. In this paper, the social marketing approach is introduced to complement the existing tools to enhance building user wellness in Malaysia.

**Discussion**

Social marketing is a distinct marketing discipline that primarily focused on influencing behaviour that will improve health, prevent injuries, protect the environment and contribute to communities (Lee and Kotler, 2015). Social marketing can be regarded as a low-cost approach that facilitates the acceptance, rejection, modification or maintenance of specific behaviour (Kotler et al., 2002). The approach using marketing approach to alters the environment to make the recommended health related behaviour more advantageous than the unhealthy behaviour which designed to replace and then communicates the more favorable cost-benefit relationship to the targeted audience.

Previous studies indicated that social marketing has directly or indirectly influenced variety of public health program and improve building user wellness. For instance, study by Gordon et al., (2006) mentioned that social marketing provides promising framework for improving health at individual level and wider environmental. Other than that, study by Eckhardt et al., (2015) found that stair promotion using specific sign has increased stair use among employee as physical activity has the potential to improve fitness, blood pressure and body composition.

As occupant well-being and health has become the key issues in built environment studies, occupant should promote and maintain their health while living in a building. McLeroy et al., (1988) stated that behaviour change that improve people health required change at individual, environment and social levels. The different types of building will present different adjusting behaviour among the occupants according to their comfort level. Stead et al., (2007) acknowledged the positive effect of social marketing to adopt healthy behaviour change where some social marketing strategy has address policy and social norm change. Other studies by Firestone et al., (2017) argued whether social marketing strategy has achieved behaviour change on consistent basis. The social marketing offered cost-effective approach to improve building user wellness compared to other approaches. Recently, policymakers, employers and researcher have developed increasing interest towards the effectiveness of social marketing in improving building user wellness.

We highlight several studies here that successfully link social marketing and building user’s wellness. Among many, study by Abelsohn et al., (2002) found the installation of detector that display high and low level or carbon monoxide exposure has improved building user awareness towards healthy indoor environment where less patients were found suffer with headache after the detector was installed. Carbon monoxide is the product of incomplete combustion of hyrdrocarbon which is colourless, odourless and nonirritating toxic. The most common indoor source of carbon monoxide including poorly ventilated gas, oil burning appliances and infiltration of polluted outdoor air which has the potential health damage on occupants. Therefore, the detector was found as significant prompt in creating awareness among building user to reduce carbon monoxide exposure.
and maintain healthy indoor environment in a building. Another study by Robertson and O’Neill (2003) found that office ergonomic training has resulted in a decrease in overall discomfort level among employees where the training provided employees with knowledge to use their work station in a more ergonomic and healthy way. In detail, the office ergonomic training has indicated high level awareness among office worker which contributed to behavioural change among employee particularly in re-arranging workspaces, adjusting furniture and changing computer work habit. In addition, study by Boutelle et al., (2001) assessed the impact of improving the attractiveness of using staircase by adding motivational sign. The motivational sign was placed at several decision point for the stairs and elevator which include the message of “take the stairs for your health” to influence building user towards stair usage. The intervention has recorded 4.4% increase in stair usage and encourage more healthy lifestyles among the office building users.

The above cases demonstrated that targeting the building users by offer related information to promote the building user wellness, can help to improve building user wellness and address their concern, to enable behavior change among them.

Conclusion and Implication
Improving building user wellness using social marketing approach are largely unrecognized in Malaysia. Previous studies had acknowledged this cost-saving strategy has impaired health and quality of life among employers and workers. It is important for the building operator to acknowledge the health issues among the occupants, understanding occupant comfort level in built environment and provide a supportive environment towards work-life balance in the organization. This study provides an alternative to the building operator and demonstrate to them that the social marketing approach can be considered as a tool to improve building user wellness.

The estimated health improvement among building user discussed in this research are based on extrapolations of the findings obtained in a relatively small number of previous studies to the general population. The validity of such extrapolations depends on several factors, including the degree to which the literatures settings are representative of the broader population and the quantity and quality of relevant scientific sources. Researcher are encouraged to further explore the effectiveness of social marketing in improving occupant wellness in specific context and testing statistically.

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Packaging the message well: a game based approach to reduce sugary drinks consumption in the early high school years.

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Project/Issue Overview
Taking a playful, engaging and age-appropriate approach, the ‘Thirsty? ChooseWater’ campaign utilised cartoon-like “baddie” and “goodie” characters within a fun, game-based intervention to alter behaviour, encouraging early teens to choose water and to reduce their consumption of sugary drinks.

The implementation was designed to fit within a 15 minute window in the school schedule when Year 7 students (first year of high school in Australia) are a “captive audience”; the time just after students receive nationally-provided vaccinations, and when they are required to remain in an observation area to monitor for adverse medical reactions.

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Background and social context
On most days of each week, nearly 25% of NSW children aged 12 – 17 consume the equivalent of at least 1.5 glasses of soft drinks and other sugary drinks (NSW Ministry of Health, 2013). The term “sugary drinks” refers to carbonated soft drinks as well as sports drinks, vitamin drinks and many fruit juices, all of which have five or more teaspoons of sugar per 250ml glass.

Consumption of sugary drinks has also been linked with a range of other ill-health consequences including type 2 diabetes, metabolic syndrome, osteoporosis, dental caries and the displacement of healthier food and beverage options from the diet. Reducing sugary drink consumption has been identified as one of the most important behaviours to address in the prevention of overweight and obesity (Hector et al, 2009).

Behavioural/Social Change Goals
The key objectives of the “Thirsty? ChooseWater” campaign and program were

• to educate Year 7 students about the amount of sugar in many common drinks
• to inform them about their drink choices and
• to reduce their overall consumption of sugary drinks.
• The long term social change goals were to play a part in reducing the incidence of:
• obesity and overweight within the target group, and
• associated non communicable diseases

Citizen orientation
Immunisation nurses identified the 15 minute time window directly after vaccinations. The nurses aims were twofold, firstly to manage boredom and prevent behaviour management issues, and secondly to use the opportunity to engage Year 7 students with a health promotion message. The campaign was therefore designed to be easily transported and implemented by immunisation nurses.

Children, their interests and orientation were central to the design of this campaign. The themes, visual designs, game mechanics and supporting materials were all aimed to engage and appeal to 11 – 13 year old boys and girls. “Play...is considered a key facilitator for learning and development across domains, and reflects the social and cultural contexts in which children live (Christie, 2001). Children’s playfulness, their enjoyment of games and the role of play as a key facilitator of learning, were all central to our thinking when designing the campaign.

The ‘snakes and ladders’ mechanic was a simple, familiar game around which to build the key messages. The visual theme and devices, particularly the “goodie” and “baddie” characters, were designed to appeal to the students’ sense of fun.

Materials were predominantly visual, in order to cater to a range of literacy levels.

The visual design was eye catching and engaging for the target segment, with clear, simple
In developing this campaign, qualitative research was used. Draft materials were tested with Year 7 student cohorts within a classroom setting, in order to gain input and ensure their suitability. Based on observation, guided discussion and informal feedback, modifications were made to the materials to ensure the material was suitable for the audience.

Following the pilot which is the focus of this paper, additional alterations were made to the materials based on in-field findings.

**Research and Insight**

1) Consumption of sugary drinks among teenagers is high.

2) Australia is one of the top 10 per capita consumers of soft drinks in the world and young males and adolescents are our highest consumers, devouring on average almost one litre (approximately three cans) per day. (Hector et al, 2009; ABS, 1998).

3) High levels of soft drink consumption have been linked to the incidence of overweight and obesity and a range of serious diseases.

4) Reducing sugary drink consumption has been identified as one of the most important behaviours to address in the prevention of overweight and obesity (Hector et al, 2009).

5) Many young teens are unaware of the health risks associated with high levels of consumption of sugary drinks.

Awareness of possible negative effects is low (Visram et al, 2016).

**Segmentation**

The target population of this campaign was early high school students. Within this population further segmentation was not employed, as in this instance, segmentation was not seen to be appropriate.

The program was specifically tailored to the needs and interests of the target population, in terms of the style, nature and tone of intervention.

**Value**

The value delivered to the target audience includes the immediate experience which was observed by immunisation nurses to be entertaining, engaging, educational and fun.

The audience also benefited from learning about an important health message, and encouragement to consider choice of drinks. Ultimately we believe this will impact student health outcomes.

The materials used in this program were specifically designed and adapted to incorporate and reinforce the key program messages. The materials can be easily and affordably reproduced by the Local Health District.
The benefit of a reduction in the consumption of sugary drinks, includes improved oral health, reduced rates of overweight and obesity, reduced incidence of diabetes and other NCDs. In addition, there are financial benefits and quality of life benefits for individuals.

**Competition**

Large global consumer goods companies produce a range of appealing sugary drinks. Packaging is sophisticated. Advertising is professional, persuasive and frequently seen. In addition, many sugary drinks are supported by a full marketing mix including social media, competitions, sponsorship, outdoor advertising, point of sale, television and radio.

A short, game-based intervention on its own will not successfully combat these sophisticated, consistent messages, however when seen in the wider context, this engaging approach can add considerable value. Examples of other complementary activities include aspects of the PDHPE curriculum educating students about advertising techniques and teaching critical thinking.

**Theory**

The transtheoretical model of the stages of change (Prochaska and DiClemente, 1986) was used in the design of this program. This model suggests that there are six stages of behaviour change: pre-contemplation, contemplation, preparation, action, maintenance, and termination.

The ‘Thirsty? Choose Water’ campaign aimed to address pre-contemplation and contemplation by addressing awareness of the amount of sugar in common drinks and by providing suggestions for alternative behaviours.

Flay and Cook (1989) suggest that social marketing campaigns are generally most effective in initially creating awareness, modifying and influencing perceptions by providing motivations to change attitudes. The authors suggest that as attitudes change, propensity to make behaviour change increases.

For this reason, in evaluating the program effectiveness, the following measures were included in the pre and post survey design:

- Awareness of amount of sugar in common drinks (soft drinks, juices, sports drinks)
- Knowledge, such as the amount of walking required to burn the calories associated with one can of soft drink
- Intention to change behaviour in relation to sugary drink consumption

**Social Marketing Intervention Mix**


Taking a playful, engaging and age-appropriate approach, the Thirsty? ChooseWater campaign utilised fun “baddie” and “goodie” characters for use in print and digital materials. The “Straws and spouts” board game, an adaptation of snakes and ladders, used a range of secondary materials to add to the students’ engagement. These include fun “collectable” guitar picks printed with
characters, a flip chart with key messages and a fridge magnet to take home. Students were encouraged to participate in an online quiz as a home follow up. The same themes were utilised and this component aimed to reinforce messages.

It was supported in a wider context by the introduction of new water chilling stations in some schools. The program also supports the PDHPE curriculum. Within the Central Coast Local Health District, the health promotion team also works closely with school canteens in order to encourage healthier lunch and snack options, involving both drinks and food options. Policy change and advocacy around sugary drinks continues in the wider, state and federal context.

**Partnerships**
- 27 schools in the Central Coast LHD area
- Central Coast Local Health District Immunisation Teams, NSW, Australia Central Coast Local Health District Health Promotion Service

**Evaluation and results**
Over 3000 students were exposed to the intervention. In order to measure effectiveness, a short pre-campaign online survey (n=582) was administered approximately 2 weeks before the campaign, and a post-campaign online survey (n=548) was administered 2 – 4 weeks after the campaign. The survey was limited to 5 demographic questions and 6 questions focused on specific knowledge and behaviour change. 3 additional questions in the post-campaign survey included to gain specific campaign feedback and to further explore campaign outcomes. Schools Physical Activity and Nutrition Survey 2010 used as reference for question development. Images accompanied some questions, to assist respondents with lower literacy levels. Schools completing the online surveys were selected to represent a broad socioeconomic cross section of the local health district.

Images accompanied some questions, to assist respondents with lower literacy levels. Outcomes on the following key measures were statistically significant. Key results included:

- 37.4% of respondents reported that they had changed their drinking behaviour based on their participation in the campaign
- 83.7% reported they drink more water
- 39.1% reported increased knowledge and awareness
- 64.0% increase in knowledge relating to the amount of activity required to burn off a
Lessons Learned
Providing fun, engaging, age-appropriate health promotion materials is a key element in the success of health promotion campaigns aimed at teens and younger people.

Reinforcing the main face-to-face messages in a follow-up digital context effectively extended engagement and the ability to increase the likelihood of behaviour change.

Success of this program is contingent upon strong collaborations between the CCLHD Health Promotion Service, who commissioned and own the materials, Central Coast High School staff, whose support ensures participation and the CCLHD Immunisation Teams, who implement the program on the ground. Without this collaborative approach, the success of the program would be significantly reduced.


References


Paper Session: Policy Legislation and Upstream Social Marketing

Session Chair:
Joy Parkinson
Introduction

Shared parental leave (SPL) was introduced in the United Kingdom in April 2015. The policy is designed to allow parents to share up to one year’s leave after the birth or adoption of their child (HM Government, 2014). Key objectives of the policy include encouraging paternal involvement in childrearing, de-gendering of parental roles, reducing gender inequality at work, offering more choice for women wishing to return to work and reducing the gender pay gap in employment. However, since the introduction of the policy, the uptake has not met expectations with only 2% of eligible couples utilising SPL (Department for Business Energy & Industrial Strategy, 2018). Drawing on conceptualisations of competition in social marketing (SM; social marketers, SMers), this paper examines whether opposing forces within the social ecological model (SEM) operate against the utilization of SPL, and how these may be used to achieve the societal objective of increasing the uptake of SPL.

Behavioural change requires an understanding of societal forces that operate for, as well as against, a decision to change, adopt or cease a behaviour (Dresler-Hawke & Veer, 2006). The SEM is one such model that aims to understand macro (culture), exo (government policy, media, broad representation of a network), meso (collective formal mass/ grouping of members in microsystem), micro (immediate interpersonal relationships, setting) forces occurring to support and shape particular outcomes (Bronfenbrenner, 1977; Stokols, 1992). However, understanding competition is also integral to achieving behavioural change and incorporates ‘behavioral options that compete with public health recommendations and
services’ (Grier & Bryant, 2005, p.322). Current decisions in opposition to an alternative may be using the social and environmental forces that may advantage a different societal objective, so understanding and incorporating competition within the SEM is essential. At present however, the SEM’s emphasis on context only enables SM to understand what molds or encourages individuals to behave in a particular manner (e.g., Lindridge, MacAskill, Gnich, Eadie, & Holme, 2013). To best understand the different forces that influence an outcome when designing interventions (e.g., Collins, Tapp, & Pressley, 2010), it is necessary to appreciate that the SEM may enlighten SMers to threats and opportunities the co-existing and competing societal objectives from differing institutions and/or policies offer.

Drawing on what is currently understood of competition within SM, it is noted that competition occurs at various levels, similar in nature to those in the SEM. For example, generic, enterprise, product and brand-level competition (see Andreasen, 2002 for an alternative levels; Noble & Basil, 2011) are used to best reflect the broad (i.e., broader decisions related as to whether the promoted behaviour would be completed; e.g., Do I focus my attention on improving my fitness?) to specific (i.e., decisions related to how the promoted behaviour would be completed; e.g., Do I run, swim or walk?) levels of competition. Contextual competition, such as commercial counter marketing, social discouragement, apathy and involuntary disinclination (see Andreasen, 1995 for alternative categorisation; Peattie & Peattie, 2003) have also shed light on what may prevent an individual from engaging in the promoted behaviour, and Schuster (2015) revealed how competition influences decision making. Still, the extension of the SEM to incorporate competition would permit a more comprehensive understanding of how to use opposing social and environmental forces for an additional societal objective (e.g., taking SPL). SM campaign strategies may then be better informed to anticipate competition while also harnessing the current social and environmental forces.

The SPL policy presents an interesting dilemma for understanding rivalries amongst social and environmental forces. That is, it is a policy that requires negotiation amongst two different parties, i.e., parents. What is currently understood about competition is that it is focused on individual decision making and omits those decisions that rely on more than one individual. The decision to utilise SPL is one that requires parent 1 to relinquish an amount of time they would have used to care for the child and give that parent 2 (e.g., parent 1 gives 3 months to parent 2). Specifically, the current study seeks to understand whether competition occurs amongst the various levels of the SEM and how SM may harness what appears to be opposing social and environmental forces to achieve a societal objective. By doing this, we aim to ensure future SM efforts to promote behavioural change consider differing forces (institutional or social etc.) to better inform SM efforts (e.g., Lindridge et al., 2013).

RQ: Does competition influence the uptake of shared parental leave? If so, how does this competition manifest itself within the social ecology model?
Methods
This project is part of a wider study that uses a mixed methods approach to inform SM activities aimed at increasing the utilization of SPL. The current study involves drawing on qualitative research completed through the use of 60 interviews with parents eligible for SPL.

Sample selection and recruitment
In order to understand why parents chose to take/ not take SPL, eligible parents were recruited. Due to privacy reasons, we engaged with Human Resource departments of small, medium and large organisations and requested they distribute a recruitment email to staff members who had taken SPL, maternity or paternity leave since April 2015. Participant’s self- selected to participate in the interviews. A total of 60 interviews were completed.

Data collection and procedure
Ethical approval was obtained prior to study commencement. For this study, we interviewed the parent that self-selected to participate. Participants were informed of what the interview entailed and informed consent was obtained in order to proceed to the interview itself. The interviews took place in a location where the participants felt comfortable. Participants were then asked to ‘talk me through the process from learning you were expecting to decide on your childcare arrangements’. All interviews were recorded and transcribed verbatim.

Analysis
After transcription, thematic analysis was completed using NVivo to reveal the forces which influenced participant’s decision not to take SPL. Quotes supplied within the findings section do not illustrate all of the themes that emerged from the data.

Findings and Discussion
The purpose of the study was to understand whether competition exists amongst differing social and environmental forces in the SEM to influence the utilisation of SPL. Overall, we identified breastfeeding as a highly influential behaviour that is reinforced by multiple levels of the SEM and at the present time, is competing against SPL. Themes identified highlight the need to explore competing societal and environmental forces that promote breastfeeding within the SEM and how SPL may assist mothers while breastfeeding.

Competition within Exosystems
The exosystem level enables SMers to understand how wider social and structural forces which can include policy, local infrastructure and media (Collins et al., 2010). At present, there is competition between social forces and the legislative environment since SPL would be viewed as rivaling a prominent policy to promote breastfeeding. For example, the National Health Service promotes breastfeeding (National Health Service, 2017) and existing SM research aims to improve the knowledge and duration of breastfeeding (Do Paço et al., 2010; Parkinson, Russell-Bennett, & Previte, forthcoming), thus, it is a socially valued idea.
The consequence of such communications is that mothers may seek external validation to reflect a societal level maternal identity since examples of breastfeeding campaigns often promote a good mother breastfeeds discourse (e.g., Gurrieri, Previte, & Brace-Govan, 2013). Cultural expectations of mothers to breastfeed are then reinforced by these policies and campaigns, and mothers are encouraged to internalize them. This reflects generic level competition (Andreasen, 2002; Clay Wayman, Beall, Thackeray, & McCormack Brown, 2007; Peattie & Peattie, 2003) but, unlike past conceptualisations of competition at this level, findings reveal that by incorporating competition within the SEM, the ‘target’ (i.e., consumer) is recognized as not being in isolation because they are not the only decision maker (i.e., parent 2) and these decisions may be shaped by macrosystems and microsystems. Thus, the breastfeeding campaign and policy are influencing both mothers and fathers in their decisions to take SPL and how they would take SPL.

“Yes, you’ve got the natural bonding which is very important and you are breastfeeding, then that bond is very very important....obviously I can’t do that, […], especially it’s important I think to document as well that all the advice you are given, umm, before the baby is born, after the baby is born, and during the baby’s been born, is to breast feed and that is almost rammed down your throat I would think it’s fair to say, that’s a massive contribution to the realities of the world.” (Father of two, did not take SPL)

Findings also revealed the need to extend the SEM to incorporate competing societal objectives and aid SMers in how to identify and use the competing forces to achieve the societal objective. Notably, we found structure-related influencers engaging with the pregnant mother, namely, the midwife, who would promote the importance of breastfeeding. Midwives discussed breastfeeding and the leave a mother would be entitled to, which presents the midwife as highly influential in leave decision making. These discussions with the midwife are likely to occur before the MATB1 form is submitted to the organization (i.e., this form confirms the pregnancy to the organization) and any dialogue of leave options are detailed. By understanding these structural forces (i.e., breastfeeding promotion and midwives) in place that rival SPL, SMers can then anticipate and complement breastfeeding communication as well as use midwives to increase SPL awareness (and the benefits it offers; e.g., father can support mother while breastfeeding) and learn how a father (parent 2) on SPL may support the mother (parent 1) while breastfeeding. By appreciating competition in this manner within the SEM, competition would no longer be viewed as a ‘battle of ideas’ (Peattie & Peattie, 2003) but instead, as an opportunity for SMers to use to the full extent.

“I think like the whole time I was pregnant and going to appointments with midwives etc., that’s the way things are spoken about, like you are going to be having this time off, like/you know breastfeeding and you need to do this, and this, and this and all of the appointments were with me, M. could come to quite a lot of them, but he didn’t have to. It was optional as well. So I think like right
from the beginning there’s this whole culture of like the focus is on you.”
(Mother of one, did not take SPL)

**Competition within the Microsystem**

The microsystem represents those interpersonal exchanges (Collins et al., 2010) that would influence behaviour. Due to the nature of SPL, the decision to utilise the policy can result from negotiation and competition between parents, e.g., mother’s behaviour to reinforce their own maternal identity and behaviour by a father to reinforce their own paternal identity. For the mother, maternal gatekeeping may occur which is “a collection of beliefs and behaviours that ultimately inhibit a collaborative effort between men and women in family work by limiting men’s opportunities for learning and growing through caring for home and children” (Allen & Hawkins, 1999, p.200). Contrary to the expectation that using SPL results from a negotiated decision, the data reveals that breastfeeding can enable maternal gatekeeping and inhibit the involvement of fathers (Cannon et al. 2008), and prevent the utilisation of SPL. In revealing this, the data shows how a mother’s own maternal identity shapes the practice of maternal gatekeeping (Hauser, 2012) which in turn relates back to the **macrosystem** pressure on mothers in society, especially in relation to their role to breastfeed. Breastfeeding therefore reinforces the reluctance to relinquish responsibility for childcare to the father (Allen and Hawkins, 1999) or limit a father’s involvement when taking SPL. Furthermore, breastfeeding at the present time encourages the gendered childcare divide, even where mothers do not consciously support traditional gendered parenting roles (Hauser, 2012).

“[...] I definitely wanted to spend kind of six months off with my son, I’d decided that beforehand. I knew that I was going to be breastfeeding, or wanted to breastfeed, and so I thought it would be easier in terms of that. Also I’d given enough time to recover after the birth.” (Mother of two. Did not take SPL)

[Interviewer: Why would you have chosen the last three months?] “Uhh I think mainly because my wife wanted to breast feed for / yes, at least the first six months, and yes, just / it’s easier isn’t it I think, you know, baby is more settled, yes, that was it really, just practical reasons I think.” (Father of one, Took SPL)

**Conclusion**

The paper contributes to the literature by extending the SEM to incorporate competition and enable SM objectives to use these forms of competition within strategies to complement competing behaviours. This extension to the SEM to incorporate competition resulted from a unique opportunity to examine behavioural change (i.e., uptake of SPL) that required two individuals as opposed to one. By exploring the leave decision making by parents after the birth or adoption of a child, this study has learned that competition should not be examined as ‘what not to choose’ as has been upheld in SM, but rather, what can SM complement and use from the ‘competition’ within the SEM to achieve change.
References


The importance of identifying macro-level unintended consequences

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Introduction/Background

One-way action can occur in society is at the macro-level (upstream), where politicians and regulators can shape behaviour through policy and law (Gordon, 2013). However, for every action there can be an equal (opposite) reaction. Using this as a basis, it is reasonable to suggest for every behaviour change policy, there is a possibility for an equal and opposite implication for the social marketing ecosystem (macro, meso and micro levels). We argue in this paper that macro-level actors analysis of the consequences of their behaviour change policies can at times be narrow, focusing primarily on intended positive outcomes. Further, a question not often asked or systematically considered by macro-level actors is: What potential unintended consequences may result from behaviour change policy? We argue this is an important question which we aim to address by presenting a procedural model of unintended consequences resulting from macro-level social marketing.

Many social marketing theorists have contributed to the literature on macro-level/ upstream social marketing (Gordon, 2013) and unintended consequences (Fry & Polonsky, 2004). However, there is limited synthesis of these two literature bases to better understand the impacts of macro-level behaviour change policy, and how social marketers can assist. Unintended consequences, outcomes which are not forecasted or purposefully intended, is an important concept to social marketing (Hoek, 2004), but one which has not been emphasised. In the context of this paper, unintended consequences can refer to adverse effects which occur as a result of the implementation of behaviour change policy by macro-level actors.

One such example is the introduction of alcohol taxes on ready-to-drink (spirits mixed with soft drinks in a can) beverages in Australia. Whilst the tax reduced the consumption of ready- to-drink beverages, a macro-level consideration which was not undertaken was the implication this may have on increasing the purchase and consumption of straight spirits.

This recent example demonstrates the opportunities for social marketers to assist macro-level actors critique and develop their behaviour change policies in such a way that it negates (as much as possible) such negative effects. Therefore, the second key aim of this paper and the model presented is theorising the key unintended consequences which can occur from macro- level behaviour change policy.
While literature in both macro-social marketing and unintended consequences provide some insight into the impact of macro-level behaviour change policy, there is little literature conceptualising how social marketers can integrate them in an organised approach. This paper therefore presents a conceptual procedural model of macro-level unintended consequences. The process model aims to assist social marketers to effectively identify, evaluate and communicate unintended consequences which may result from macro-level behaviour change policy. We also propose discussion questions at the end to assist in the refinement and improvement of the suggested process model.

Unintended Consequences
Many scholars have contributed to the literature on unintended consequences (Fry & Polonsky, 2004; Stewart & Martin, 1994). These contributions include the unintended consequences of marketing and public policy. Interestingly, whilst there are discussions of unindented consequences in related disciplines, there is limited discussion in the social marketing literature. In the marketing literature, Fry and Polonsky (2004) take a firm (organisation) perspective from the meso-level, suggesting the need to examine not only the intended beneficial outcomes of exchanges for firms and stakeholders, but also include analysis of when these outcomes may have unanticipated impacts on consumers and society. Hoek (2004) on the other hand addresses the unintended consequences of tobacco promotion restrictions from a macro-level perspective. Hoek (2004) identifies attempts to reduce the impact of tobacco industry promotions which can lead to unintentionally stimulating the development of other initiatives by the tobacco industry which are harder to regulate and reach target audiences more effectively. In policy literature, scholars have found evidence to support the argument of macro-level behaviour change approaches leading to equal negative unintended consequences downstream. For example, DiNardo and Lemieux (2001) found increases in minimum drinking age did not reduce the prevalence of alcohol consumption.

They found it instead leads to increasing the prevalence of marijuana consumption. The problems these scholars identify are relevant to social marketing as they aim at ensuring macro-level behaviour change approaches are maximised to encourage health and wellbeing. However, whilst these two literature bases align with social marketing efforts and discussions, there is limited synthesis to bridge these discussions in marketing and public policy which may assist macro-level social marketing identify unintended consequences.

Conceptualising Unintended Consequences
In this paper, we provide and define three examples of different unintended consequences which can result from macro-level behaviour change policy. The process model for unintended consequences is then presented.

Boomerang effects.

The boomerang effect can be defined as an unintended consequence which occurs when an individual performs a direct opposing behaviour to that of the desired behaviour encouraged by macro-level behaviour change policy (Ringold, 2002). Boomerang effects have occurred in a number of notable behaviours of interest to social marketers for example alcohol taxes and health
warnings. Ringold (2002) points out warnings in public health interventions can lead to extreme negative effects. They explain, through psychological reactance theory, that taking the freedom from individuals can arouse an opposition due to a perceived threat to personal choice and freedom. A recent example of the boomerang effect results from macro-level policy change can be seen in the implementation of the ‘alcopop’ tax, in Australia. The main aim of ‘alcopop’ tax was to increase prices of ready-to-drink alcohol beverages to discourage overconsumption. Reports suggest there was a decrease in ready-to-drink alcohol beverage purchases. However, there was an increase in the purchase of other forms of alcohol which were perceived as more affordable by consumers. “Data to be released today by the Liquor Merchants Association of Australia shows that while there was a 30% fall in the volume of ready-to-drink (RTD) alcohol sold between April and June, it was cancelled out by a rise of 46% in the amount of full-strength bottled spirits sold over the same period” (Smith, 2008).

**Alternative Backfires.**
We define alternative backfires as individual’s adoption of a substitutable behaviour which is equal to or more harmful than the originally targeted behaviour. Rational choice theory helps explain alternative backfires as its central proposition relates to individuals weighing up the costs and benefits of deviant behaviours in deciding to perform a behaviour or not (Hayward, 2007). We suggest that macro-level policy change may increase costs of an undesired behaviour, which in turn may increase the appeal or value of substitutable harmful behaviours. For example, Miller and Droste (2013) report the increase of taxes on alcohol beverages to curb its consumption led to increases in individuals’ consideration of consuming illicit drugs. Based upon rationale choice theory it may be suggested that individual’s perceived more value in paying and consuming illicit drugs than paying the increased prices for alcohol due to the alcopop tax.

**Collateral Damage.**
The notion of collateral damage resulting from behaviour change approaches is not new (Bluthenthal, et al., 1999), but often not discussed in social marketing literature. Scholars have discussed collateral damage in terms of ‘second-hand effects’ (Giesbrecht, et al., 2010). Giesbrecht and colleagues (2010) for example, discusses the collateral damage or ‘second-hands effects’ of individuals drinking on their peers, family and society. Our conceptualisation of collateral damage for unintended consequences in this model extends this perspective. Collateral damage in our model refers to actors at both the micro and meso-level of the ecosystem indirectly impacted by macro-level behaviour change. For example, In New South Wales, Australia, it could be suggested there has been acknowledgement of the collateral damage of the lock out law and last drink policy: “At the same time, there's been strong views put that this has been an impact on live music and the vibrancy in this great city.” (Gerathy, et al., 2016) This collateral damage includes businesses closing due to dramatically reduced operating hours, as well as significant losses of casual work hours and subsequent financial wellbeing for staff.

**A procedural model for unintended consequences**
We propose that the unintended consequences identified previously can be identified and addressed by social marketers in four steps (Figure 1); identify macro-actors and policy change, find meso and micro actors impacted by policy change, identify and evaluate unintended consequences,
communicating unintended consequences to macro-level actors.

**Step 1-Macro Actor and Policy Identification:** To begin the process of identifying unintended consequences, it is suggested that social marketers identify macro level actors and the policies they are putting forward or implementing.

**Step 2-Impacted Meso and Micro level Actors:** The next step of identifying unintended consequences is identifying potentially impacted actors at the meso and micro level of the ecosystem. This step can happen simultaneously with Step 3.

**Step 3-Evaluation of (Predicted) Unintended Consequences:** Once impacted meso and micro level actors are identified, the identification and classification of the unintended consequences and their severity should be noted. This could also be preventative (e.g. scoped prior to policy being implemented)

**Step 4-Rationale Communication with Macro-level Actors and Suggested Policy Amendments:** The final step involves synthesising information from step 3 and rationally communicating these unintended consequences to the macro-level actors identified in Step 1. Can suggest policy alternatives or other social marketing approaches.

**Proposed discussion questions**

1) How can social marketers use models such as these to advocate to policy makers to consider consequences of the programs and policies they adopt?

2) How important is the consideration of unintended consequences for the development of social marketing programs and their associated policy implications?

3) Using this type of framework how can we mitigate the unintended consequences of social marketing programs and/or policy that are by design intended to help people live happier and healthier lives?
Figure 1. Process model for Macro-Level Policy Unintended Consequences

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Doctoral Colloquium: Day 3

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From paddock to reef: Adopting social marketing to change on-farm management to improve water quality

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Introduction
Coastal water quality is changing around the world as a result of increasing loads of nutrients, sediments and pollutants discharge from land (Fabricius, 2005). This is also evident for the iconic World Heritage Listed Great Barrier Reef (GBR). The marine water remains in poor condition ‘largely due to the collective impact of land run-off associated with past and ongoing catchment development, coastal development activities, extreme weather events and climate change impacts such as the 2016 and 2017 coral bleaching events’ (Waterhouse, et al., 2017, p. 7).

Research shows that sub-catchments with intensive agricultural cultivation demonstrate higher concentrations of run-off compared to catchments under natural vegetation (McKergow, Prosser, Hughes, & Brodie, 2005). Agricultural land uses are regarded as a major contributor to deteriorating water quality in coral reefs (Pickering, Hong, & Kealley, 2017; Wilkinson, 2004). Between 1960 and 1995, the global use of nitrogen fertiliser increased sevenfold (Tilman, Cassman, & Mats, 2002), a

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further threefold increase is expected by 2050 if fertiliser efficiency is not achieved (Tilman, et al., 2001).

With increasing terrestrial pollutants, the GBR is under great pressure and the water entering the lagoon affects the coastal reefs, marine ecosystems and reef communities. The Sandy Creek catchment, located within the Mackay Whitsunday region, is one of six natural resource management regions covering the Great Barrier Reef catchment (Waterhouse, et al., 2017). Sandy Creek does not experience extensive upstream catchment or high annual rainfalls to dilute the pesticide concentrations entering the catchment, which further heightens risk of pesticide presence above recommended levels in downstream aquatic ecosystems (Wallace, et al., 2017). When compared to larger river systems in the Wet Tropics runoff from a large catchment of farms flows into a narrow waterway that has a smaller water volume further exacerbating chemical run-off concentrations. Consequently, Sandy Creek is deemed to be a ‘Very High’ risk for the health and resilience of the GBR (Australian Government, Queensland Government, 2013). The Mackay Whitsunday region scored a B (45.2% reduction in pesticides towards a 60% target) in 2016, and thereby was considered to be the region with the greatest cumulative reduction (Australian Government and Queensland Government, 2017). While geographical challenges will always be present, agricultural pollutants may be managed. Of concern, exceedances continue to be evident in the Mackay Whitsunday region (Wallace, et al., 2017), which suggests that more can be done.

Addressing on-farm growing practices is critical to improve water quality draining from agricultural land (Royle & DiBella, 2017) and improve reef health (Smith, Turner, Vardy, & Hugg, 2015). Additionally, water quality improvements can also be made via land use changes (Tilman, Cassman, & Mats, 2002), however land use is beyond the scope of the present study which is situated within a larger growing practice change program. Sustainable growing practices ‘will require increased crop yields, increased efficiency of nitrogen, phosphorus and water use, ecologically based management practices, judicious use of pesticides and antibiotics, and major changes in some livestock production practices’ (Tilman, Cassman, & Mats, 2002, p. 676).

Environmental problems are caused by patterns in human behaviour and to overcome environmental issues behaviours need to change (Schultz, 2014). It is important to note that asking growers to change ‘involves asking them to change the farming methods of a lifetime’ (Arklay, van Acker, & Hollander, 2018, p. 1). Behavioural and social sciences offer a rich body of literature on how behavioural science has been used to tackle people’s health (Luca & Suggs, 2013). Over time less attention has been directed towards changing individual’s environmental issues (Truong & Dang, 2017; Truong, 2014), but cases documenting success in achieving growing practice change are now emerging (for example see Arklay et al., 2018).

Over time a diverse range of disciplines have been employed to tackle complex environmental issues (Pickering, Hong, & Kealley, 2017) including (but not limited to) targeted extension activities to improve water quality (Royle & DiBella, 2017), examining heterogeneity in practice adoption (Rolfe & Harvey, 2017) and improving growth parameters and yield attributes (Singh, Verma, & Srivastava, 2017). Additionally, government bodies, water quality scientists, marine scientists,
agronomists and many other experts have attempted to promote sustainable farming practices (Pickering, Hong, & Kealley, 2017) investing substantial amounts of money to promote growing practice change to benefit the GBR (see Arklay et al., 2018) who report funds invested for one growing practice change project – RP20). While a substantial effort to reach water quality targets are evident, the Scientific Consensus Statement (2017) suggests that current initiatives will not deliver the water quality targets.

This study is part of a larger multi-disciplinary study. Working in partnership with agronomists and environmental scientists the project aims to deliver a range of activities including water monitoring and on farm trials to 1) link farm practice change with water quality on a local scale, 2) encourage grower ownership of water quality in Sandy Creek through the provision of water quality data to growers in short time frames and 3) demonstrate profitable practices that can positively influence water quality via farm block trials. Situated within the wider project the larger social marketing study, of which this study is one small component, seeks to identify barriers to growing practice change and develop strategies to overcome this. Adopting a longitudinal research design this theoretically grounded study seeks to compare and contrast growers who are engaged in the water quality monitoring and farm trials with those who are not. In the first phase this study will identify the attitude-behaviour gap for growers participating in this study (Year 1), a process that will be repeated in the follow up study (Year 2). Changes in growing practices will be compared with changes in the attitude behaviour gap for growers participating in the study to identify strategies that can be implemented in future to achieve growing practice change.


References


Irrigation Scheduling. *Sugar Tech.*


Social marketing and the food environment: a multi-stream time-series intervention study.

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Stage of candidature: 6 months; pre-confirmation.

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Introduction/Background

Obesity is caused by one or more of the following factors: poor diet, lack of exercise, and/or genetic predisposition, is a global epidemic in the developed world (WHO, 2015). With more than 25% of the adult population considered obese, Australians rank fourth as the heaviest country per capita in the world (Sullivan et al., 2015). The food environment (FE) plays a contributory role in influencing consumer choices (Glanz & Mullis, 1988). Numerous studies have identified lower socio-economic-status (SES) areas are significantly less

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healthful than their advantaged counterparts (Cavanaugh et al., 2014; Cavanaugh, Mallya, Brensinger, Tierney, & Glanz, 2013; Dale, 2009; Gao, Yu, & Lee, 2013; Williams, Thornton, Crawford, & Ball, 2012). Other research suggests that these communities rely significantly more on public health facilities, placing avoidable burdens on the state (Boshoff, Dollman, & Magarey, 2007). Researchers have called for a change in direction for FE interventions, urging the benefits of co-creation and input from knowledgeable local experts to improve the healthfulness of a community (Storr, Carins & Rundle-Thiele, 2016). Not only does this provide the intervention with local FE knowledge, but is shown to improve willingness and motivation of participants (Wymer, 2011).

Given the issues outlined above, it is critical to intervene and seek to influence the availability of healthier dietary choices (Glanz, Bader, & Iyer, 2012). This research aims to advance social marketing literature by exploring the effectiveness of a process known as interactive management (IM), or collective management (due to its co-creative nature). Here, IM is a methodology which brings together stakeholders in order to co-create, initiate, and evaluate a plan aimed at improving the FE. Though IM has been used effectively in corporations (Leimeister, 2010), and more recently it has been conceptualised for use in the broader social marketing discipline in the areas of research methods, and behavioural change (Brychkov & Domegan, 2017; Domegan, McHugh, Birosckak, Bryant, & Calis, 2017; Domegan et al., 2016), it has not yet been applied in the healthy eating domain or to develop FE interventions, though the method does show promise in this area (Brychkov & Domegan, 2017). In addition, while interventions have been conducted in Australian FEs, such as an industry self-regulation study conducted by Hebden, King, Kelly, Chapman, and Innes- Hughes (2010), in which 16 organisations sought to limit unhealthful food advertising in media, along with numerous studies on the effectiveness of self-regulation initiatives (Hebden, King, Kelly, Chapman, Innes-Hughes, et al., 2010; Roberts, Pettigrew, Chapman, Quester, & Miller, 2014), current research provides no evidence of a community-based stakeholder collaboration approach to improve those most disadvantaged neighbourhoods (Sisnowski, Street, & Merlin, 2017).

**Research aims and research questions**

The aims of this PhD research project are to improve the healthfulness of a low-SES FE (specifically Upper Coomera Queensland). First, the research aims to identify which areas of the FE can feasibly and effectively be modified to improve healthfulness. Once diagnostics have taken place, the feasibility of multiple stakeholder inputs into a social marketing intervention will be investigated. Finally, the research will seek to quantify the effectiveness of the IM intervention, to verify the value of improving other FEs using this method. The dissertation has been planned as three studies to answer the following research questions:

RQ1: Which aspects of the food environment within one low-SES community can be modified to improve the healthfulness of that environment?
RQ2: Can IM be used to identify areas for improvement and to facilitate FE change within one low SES community?

RQ3: Can a multi-stream social marketing intervention focussed on the FE effectively improve the food environment of a low-SES community within Australia?

The current research seeks to go beyond-individual influences on eating behaviour, or traditional down-stream social marketing which places onus on changing the behaviour of the individual (Andreasen, 1997), and into the realm of mid-stream and up-stream social marketing, or behavioural eco-systems. In contrast to down-stream social marketing, mid-stream moves away from changing specific individual behaviour and into a broader strategy directed at achieving FE change by addressing poor social conditions which facilitate unhealthful eating, while up-stream focuses on the macro environment and policy change (Saunders, Barrington, & Sridharan, 2015). Recent literature identifies the pressing need for integrated approaches, combining the three levels of social marketing into a multi-stream approach (Andreasen & Zidar, 2011; Brennan et al., 2016; Newton et al., 2016; Wymer, 2011). Such a theory states that the individual is not in 100% control of their eating behaviour, rather individuals are influenced by various environmental stimuli around them (Brennan, Previte, & Fry, 2016; Newton, Newton, & Rep, 2016). Thus to facilitate change, this research aims to target industry and community in a collaborative, co-designed strategy, answering researchers calls for a “wider and deeper” approach to social marketing (Andreasen & Zidar, 2011; Brennan et al., 2016; Newton et al., 2016; Wymer, 2011).

**Method**

The research will seek to use both quantitative and qualitative research in a mixed method approach. For study 1, the primary tool for quantitative data collection will be the Nutrition Environment Measures Survey (NEMS) for stores and restaurants, this will be the basis for determining the healthfulness scores of the community. NEMS is a reliable and effective supply-side nutritional gathering tool which has been effectively used and appraised in numerous studies (Gustafson, Hankins, & Jilcott, 2012). NEMS measures the FE through observational research, assessing a number of elements of the FE known to affect healthy eating. These elements include accessibility, availability, price, information, facilitators and barriers (including promotion and placement) (Glanz, Sallis, Saelens, & Frank, 2005). Typically, where aspects of the FE are unsupportive of healthful eating, points are deducted, where those aspects of the FE are supportive, points are given. NEMS is split into two surveys, NEMS-S (stores) and NEMS-R (restaurants). The result is a numerical value which can be used to compare the healthfulness of the FE between retail food outlets (RFOs) across regions (Glanz, Sallis, Saelens, & Frank, 2007; Saelens, Glanz, Sallis, & Frank, 2007) and to compare FE change across time.

Google Maps and Socio-Economic Indexes for Areas (SEIFA) were consulted to identify a low-SES suburb in which to conduct the research. SEIFA is an Australian Bureau of Statistics product that determines the extent to which a particular suburb is advantaged or
disadvantaged. Suburbs are broken down into quintiles, with 1 being highest-SES and 5 being lowest-SES (ABS, 2011). Google Maps was used to examine which suburbs in the 5th quintile (Low-SES suburbs) were quantifiable based on the number of outlets present. A sample size of 30 was required, and given typical rejection (unmeasurable) rates of around 10% (Carins & Rundle-Thiele, 2014; Glanz et al., 2007; Saelens et al., 2007), a feasible suburb needed to contain more than 40 outlets. Upper Coomera met the primarily sampling criteria of a 5th quintile SES suburb with access to around 40 food outlets, therefore it was determined that the suburb boundaries set on Google Maps would be a suitable sampling area (see figure 1). A total of 40 outlets were identified by searching Google maps and physically surveying the area (Grocery stores: N=5; Convenience stores: N=3; Restaurants: N=32).

Figure 1: Upper Coomera survey area

Once aspects of the FE needing improvement have been identified, Study 2 will aim to assess stakeholder support for change, and generate strategies for change via an interactive management process (IM), using stakeholder based group interviews.

In order to determine feasible and effective supply-related obesity factors, 6-10 FE stakeholder representatives from numerous sectors including: food outlet operators, health departments, local government, media, industry, local community members and non-profit organisations will be selected in an effort to combine their knowledge to enhance the community of interest. The data collection process for IM aims to structure the participants’ activities and focus their thinking. All members must be given a fair chance of influencing decisions by giving members and opportunity to contribute through a structured, but open
discussion. Individuals may formally influence decisions via voting.

The data collection process for IM involves seven steps employed as the core structure (Leimeister, 2010), including 1) Assembling a diverse group of local FE stakeholders; Idea writing (quick idea generation); Nominal group technique (clarify, edit and rank initial ideas); Interpretive structural modelling (computer assisted method for mapping the elements of a complex issue); Options field (conceptual design which shows, in one diagram, all the prospective designs and all of the conceived options); Options profile (selecting specific alternative conceptual designs from an options field); Trade-off Analysis Method (evaluating and choosing between alternative designs).

In essence, FEs generally offer little support for healthy eating, and therefore could be significantly improved, particularly in low-SES communities (Block, Scribner, & DeSalvo, 2004). IM is the methodological co-creation of a plan following the previously identified steps aimed at enhancing FE stimuli to support healthier eating. Initially the group partakes in a quick idea generation which are then clarified, edited and ranked based on a voting system. Simply using a whiteboard or projector, the elements of a complex issue, such as obesity and the FE, are brainstormed into an agreed diagram. Ideas are converted into conceptual design by the group which shows in one diagram, all the conceived dimensions of the prospective designs, and all of the conceived options within each dimension. Finally, opportunity cost is weighted by evaluating and choosing between alternative concepts by comparing the differences between the alternatives, and for clearly documenting the basis of decisions made (Leimeister, 2010).

Finally, in Study 3, in collaboration with stakeholders, strategies to improve the healthfulness of the FE will be deployed. Following which, process and outcome evaluations will be conducted again on the FE to assess the intervention’s effectiveness. Process evaluation will be conducted via a quantitative survey of participating retailers to assess how the strategies were received, and identify issues for improvement. Outcome evaluation will involve assessment of the FE post strategy implementation to assess the level of change.

Discussion and conclusion
This research seeks to contribute to progressing social marketing literature by setting a new standard for implementing change through collaborative IM, tailoring an intervention to the unique aspects of a specific low-SES community. The research will move away from down-stream, consumer focused behaviour change, and capitalise on multi-stream social marketing theory by co-creating a strategy through which societal change can be achieved (Brychkov & Domegan, 2017; Domegan et al., 2017; Domegan et al., 2016). Acknowledgement that environmental stimuli accounts for at least some of consumer dietary decision making is relatively widespread (Brennan et al., 2016; Newton et al., 2016), thus calls to tailor the behavioural ecological system and prompt consumers in a favourable direction are prevalent amongst social marketing researchers (Brennan et al., 2016; Karpen, Bove, & Lukas, 2012; Newton et al., 2016; Wymer, 2011). IM has the potential to be at the
forefront of FE interventions by guiding social marketers towards broader, systems based thinking, and marketplace change with an emphasis on co-creation between stakeholders, researchers and the community (Domegan et al., 2016; Karpen et al., 2012).


References


How Healthy Habits Grow: Expanding marketing empirical generalisations to physical activity

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Introduction/Background
An increase in cross-disciplinary scientific collaborations has seen a number of methodological approaches from a range of disciplines, including but not limited to public health, social marketing and health psychology advancing the field of population health (Cheng, Kotler, & Lee, 2010; Grier & Bryant, 2005; Hall, Feng, Moser, Stokols, & Taylor, 2008; Neuhauser, Richardson, Mackenzie, & Minkler, 2007; Oborn & Dawson, 2010). One of these disciplines – marketing – has robust methods of how to analyse and understand consumer

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behaviour, including the purchasing of products and services (Romaniuk & Sharp, 2016; Sharp, 2010) and engagement in health behaviours (Kubacki & Rundle-Thiele, 2013; Rundle-Thiele et al., 2013). Such insights and associated methods could be useful in understanding of co-occurrence of health behaviours and to establish whether they compete with each other. Marketing science (Bass, 1993) offers a new approach for analysing the co-occurrence of health behaviour, while also providing insight in how health behaviours compete and, ultimately, help to inform marketing strategies. The aim of this study is to apply the Duplication of Behaviour analysis to analyse and understand how health behaviours, specifically physical activity behaviours, co-occur and compete.

Despite increased access to health information (Kickbusch, 2008) and significant public health efforts (Randolph & Viswanath, 2004), adherence to healthy lifestyle behaviours is low, especially for diet and physical activity (Ford et al., 2011; Kvaavik, Batty, Ursin, Huxley, & Gale, 2010; Loprinzi et al., 2016; Mawditt et al., 2016). Physical inactivity can negatively affect health-related quality of life (Bize, Johnson, & Plotnikoff, 2007) yet is prevalent in approximately one-third of the global population (Hallal et al., 2012). Given the important health benefits associated with physical activity (Warburton & Bredin, 2017), the promotion of physical activity is receiving a lot of attention in social marketing research and practice (Kubacki, Ronto, Lahtinen, Pang, & Rundle-Thiele, 2017).

**Understanding repeat-behaviours**

An individual’s health is largely influenced by the health-related behaviours that they engage in, and how often they do so. These behaviours may be both positive (i.e. being active, not-smoking) and negative (i.e. physical inactivity, smoking). Repeat-engagement in healthy behaviours, such as physical activity, leads to better health outcomes and a lower risk of mortality for individuals (Gardner, Lally, & Wardle, 2012; Kvaavik et al., 2010; Warburton & Bredin, 2017). In addition, having many people engaging in healthy behaviours improves population-level health. Similarly in marketing, the repeat-buying of good and services by individuals, and having many customers buying or using them, increases profit. Hence, understanding repeat behaviour is fundamental to both health and marketing. While many disciplines seek to understand health, and other repeat behaviours, the population and multi-level approaches used in marketing may offer unique perspectives in addition to the traditional focus on awareness, knowledge and attitudes used in other behaviour change disciplines (Davis et al., 2014).

Marketing science has developed a body of knowledge about the analysis and understanding of repeat-buying behaviours, through the identification and replication of patterns in buying behaviour across a range of conditions (Uncles & Wright, 2004). As a result, evidence-based patterns of buying behaviour have been established in various commercial and non-commercial contexts, including the purchasing goods and services, including fruit and vegetables (Anesbury, Greenacre, Wilson, & Huang, 2017), alcohol (Cohen, 2010; Dawes, 2008), cigarettes (Dawes, 2014), and sportswear (Dawes, 2009). The
patterns have also been extended to other repeat-behaviours such as TV viewing, radio listening, cultural event attendance (Trinh & Lam, 2016) and gambling (Lam & Mizerski, 2009). More recently these patterns have been identified for physical activity behaviours, another repeat behaviour, (Gruneklee, Rundle-Thiele, & Kubacki, 2016; Wilson, Sharp, Nguyen, & Bogomolova, 2017), however these are the only studies that have investigated the application of marketing empirical generalisations to physical activity, so replication is required. Further, they have used standard self-report questionnaires which have limitations due to inaccurate recall (Prince et al., 2008; Sallis & Saelens, 2000; Shephard, 2003). Therefore, there is a need to test the application of these consumer behaviour analyses with more accurate measurement of physical activity behaviours.

The aim of this paper is to: (1) apply the duplication of purchase analysis (renamed the “duplication of behaviour” analysis) to physical activity, (2) introduce a popular method for the assessment of physical activity behaviour – an activity recall program, MARCA (details in the method section), (3) analyse and understand the co-occurrence and competition of physical activities, and, (4) provide insights into the promotion of physical activity.

**The Dirichlet Theory**

Dirichlet is a theory that explains and predicts patterns of repeat-buying behaviour (Goodhardt, Ehrenberg, & Chatfield, 1984). It is used to benchmark, interpret and predict brand performance in markets that are stationary (i.e. no-trend) in the medium term and un-segmented (i.e. different brands not appealing to different people, evidenced in consumer goods categories, banking services and media usage) (Anesbury, Winchester, & Kennedy, 2017; Lees & Winchester, 2014; Uncles, Kennedy, Nenycz-Thiel, Singh, & Kwok, 2012) – the key assumptions of the Dirichlet model. Insights from Dirichlet were once (and sometimes still are) controversial in marketing. Markets were believed to be dynamic due to the introduction of new brands, trends, pricing, changing economies, technology and more and it was assumed that different consumers (based on demographics characteristics) purchase different brands (Kotler & Armstrong, 2010; Kotler & Keller, 2012). Yet, the repeated findings that the Dirichlet model does apply to repeat behaviour, across many different conditions, suggests otherwise. This has been received with some scepticism by marketers, but is slowly receiving more uptake in academia and industry, shifting their focus from differentiated products and targeted advertising, and towards products that have wide appeal, and the use of mass-marketing strategies (Romaniuk & Sharp, 2016; Sharp, 2010)

*Expanding marketing science to social marketing*

Yet, marketing science may not translate to health behaviours. While physical activities are similar to the consumption of goods and services, it is reasonable to think that health behaviours differ from *buying* behaviour, which is where the majority of contexts where marketing science has been applied.

If we treat the collective physical activity behaviours as a “category,” we can see how physical activity could violate the Dirichlet’s assumptions of stable and unsegmented
markets. Firstly, the stability of health behaviours may be disrupted by the media coverage of health-related fads (i.e. Paleo Pete, “Fast Exercise”), research findings, economic factors, technology, availability, and much more (Thompson, 2016). Second, health behaviours are often segmented as demonstrated by the very common tailoring of health messages and interventions. This segmentation is based on theoretical models and the documented socio-demographic differences between people who engage in different health behaviours, thereby informing the targeting and or tailoring of health communication (Noar et al., 2007; Reimer & Kreuter, 2007; Schmid et al., 2008; Snyder, 2007) The perceived instability and segmentation occurring in the physical activity market violate the Dirichlet assumptions, which suggests that the model would not fit. However, the history of marketing science highlights the need to test these models comprehensively – to support or disconfirm current approaches. If the Dirichlet model does consistently fit physical activity behaviours, this may challenge traditional views, theories, behaviour change strategies and marketing strategies in health (Baranowski, Cullen, Nicklas, Thompson, & Baranowski, 2003), in the same way that Dirichlet has evolved the marketing discipline (Sharp, 2010; Romaniuk & Sharp, 2016).

Other notable differences between physical activity and buying behaviours exist. While some products and services are purchased or consumed on a daily basis, decisions related to sedentary of active behaviours may be made multiple times a day and across a range of contexts in relation to transport, chores and leisure-time (fitness, stress relief, socialisation etc). The frequency of repeat-engagement in physical activity is much higher than the repeat-purchase rates of products. Another possible difference is the exchange that occurs with these behaviours. Money and time is exchanged to purchase products and services. Whereas, for physical activities it may be money, time and most importantly, sacrifice. One must give up more desirable (less healthy) alternatives, such as watching a movie or driving, that are exchanged, depending on the context. For example, going for a walk takes up time that could have been used to watch TV, or joining the gym requires money and time.

Despite these differences between health and buying behaviours, preliminary extension of marketing analyses into health-related contexts, such as purchasing of fruit and vegetables (Anesbury et al., 2017) and engagement in physical activity (Gruneklee et al., 2016; Wilson et al., 2017) suggests the applicability of Dirichlet to health behaviours – this makes sense given that the Dirichlet is used to model competitive choices within a category (e.g. comparing brand purchases within the cereal category). Some physical activity decisions are competitive. Different types of physical activity may compete for time (i.e. the gym and running), or money (i.e. gym class vs. social sport), as demonstrated in Grunklee and Colleagues (2016) work. However, more research is required to extend the preliminary application, to see to what extent physical activities co-occur and compete.

**Duplication of purchase**

One well-established method in marketing is the Duplication of Purchase analysis, part of the Dirichlet Model (Uncles, Ehrenberg, & Hammond, 1995). The Duplication of Purchase
analysis has been replicated across various commercial and non-commercial contexts (i.e. gambling behaviour, attendance at cultural events), with consistent findings resulting in the Duplication of Purchase Law (Uncles et al., 1995) – a pattern that describes population-level multi-brand buying in stable, unsegmented markets (Ehrenberg, Uncles, & Goodhardt, 2004; Goodhardt et al., 1984). The Duplication of Purchase Law demonstrates that: (1) people have polygamous loyalty – people buy multiple brands within a category brands and therefore all brands compete, and (2) the number of people buying the brand (penetration) is the dominant driver of how brands compete – of the people who buy one brand, a greater proportion of them will also buy a bigger brand, whereas fewer will also buy smaller brands (Ehrenberg, 1988; Sharp & Sharp, 1996). The deviation analysis demonstrates whether two brands share more or fewer customers than predicted by the model, for that population – with over- or under-sharing indicating functional and/or distribution similarities or differences. Further, it is a simple analysis to use and interpret, making it valuable for use in research and industry.

**Applying the Duplication of Behaviour Analysis to Physical Activity**

To understand its application in the context of physical activity behaviours, Duplication of Purchase is referred to as Duplication of *Behaviour*. If the Duplication of Behaviour Law is evident for physical activity behaviours, this would suggest that: (1) people have polygamous loyalty to different physical activities—such that they engage in a variety of activity, that is, they both co-occur and compete, and (2) the number of people engaging in a behaviour (prevalence) drives how much two physical activity behaviours compete with each other – where behaviours co-occur more with behaviours that are more prevalent, and less with behaviours that are less prevalent. Deviations from model-predicted values indicate whether any two behaviours compete to a greater or lesser extent than we would expect for that population (based on theoretical values). Deviations indicate that there are important similarities and/or differences driving people to engage in the competing health behaviours. Both the patterns and deviations may carry important implications for the marketing of physical activity.

In this paper, the Duplication of Purchase Law is referred to as the Duplication of *Behaviour* Law. The primary aim of this study is to extend the application of this duplication analysis social marketing research (as previously done by Gruneklee and colleagues (2016)), to both replicate and extend on their work by including (1) more accurate measures of physical activity, (2) tests of fit of real world data against theoretical values, to allow for important behavioural and marketing implications to be understood.

Findings from this study will have the following implications:

1) Build on my first PhD study which found that another of the marketing empirical generalisations, the Negative Binomial Distribution, applies to physical activity behaviours,

2) expand on prior research by applying the duplication analysis to physical activity through the use of a the most accurate self-report measure of physical activity to date,
3) Provide new insights into physical activity competition, by analysing how physical activities co-occur in the population and whether this co-occurrence is higher, lower or as expected based on the Law.

4) Give new insights to social marketers about how people engage in physical activity behaviours and how to more effectively promote them.

Method

I am currently in the process of obtaining data for this study. I will be gaining access to data about Australian adult’s engagement in physical activity, using the Multimedia Activity Recall for Children and Adolescents (MARCA). MARCA is a computer-delivered use-of-time instrument designed to address limitations of self-report recall questionnaires. MARCA was originally designed to capture children’s physical activity behaviours (Ridley, Olds & Hill, 2006) however it has since been extended to adults, proving to be a valid and reliable self-report measure of use-of-time and energy expenditure (Gomersall, Olds & Ridley, 2011). Importantly, MARCA has moderate to strong validity when compared with results from accelerometer data, suggesting it is a feasible and accurate self-report measure of adult’s physical activity behaviour and energy expenditure (Gomersall et al., 2011).

The data will show both frequency and duration of engagement with different types of physical activities. Physical activities are separated into different categories of different levels. Within the physical activity superdomain there are three macrodomains: active transport, play, and sport exercise. Within these there are six mesodomains: walking, other, active play, games, sport, and exercise. Within these there are nine microdomains: walking, cycling, new locomotions (i.e. a scooter), active play, games, team sport, non-team sport, dance, and gym. Within these there are over 100 different activities. The overall sample size and penetration for each of the activities, will determine whether the data is analysed at an activity, micro, meso and/or macrodomain to gain a comprehensive insight into the co-occurrence and competition of different domains and/or activities.

For the Duplication of Behaviour analysis – individual level data for frequency of engagement (i.e. number of sessions in a given time period) is required. However, I will also attempt to extend the analysis to incorporate quantity of engagement (i.e. number of minutes). While this is not typically considered in a duplication of purchase analysis, for physical activity behaviours it is an important consideration given that the duration of exercise will influence health outcomes. The analysis may also be extended to include a triplication of engagement, where the co-occurrence of at least three different behaviours may be determined.

By the time of the conference I will have the data and so will be able to present at the very least some preliminary results and insights.

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