Food marketing to children in a digital world
Methods, ethics, challenges
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WHO’S FEEDING THE KIDS ONLINE?
Digital Food Marketing and Children in Ireland
The Rights framework

UNCRC, 1989

- Children have rights...
  - to protection of health, of privacy, and against economic exploitation
  - to participation (including in digital media)

- Parents should facilitate these rights
- States should support parents in this

- UNCRC, Arts. 3,4,5,12, 13,14, 16, 17, 18, 24, 32
- International Covenant on Economic, Social and Cultural Rights
- UN ’Ruggie’ Guiding principles on business and human rights
Gaps in current regulation

- Addresses “child-directed” / “children’s” media, not children’s greatest media use
- Applies to marketing targeted at children, not marketing to which they are exposed
- Nutrient Profiling methods: weak or absent
- Adolescents rarely protected
  - NB: In social media, everyone’s an adult
- Digital media rarely addressed
‘Advertised diet’ on regulation-compliant children’s TV Island of Ireland
Viewing patterns: 4-6 years (NI/ROI)

UK Nutrient Profiling (NP)
53% not permitted


WHO NP
74% not permitted

- Not permitted to be marketed…
- Permitted
Figure 14: Estimated weekly hours of media consumption at home or elsewhere among users, by age: 2016

- **Aged 3-4**: 14 hours 12 minutes
- **Aged 5-15**: 13 hours 36 minutes
- **Aged 5-7**: 12 hours 24 minutes
- **Aged 8-11**: 13 hours 30 minutes
- **Aged 12-15**: 14 hours 42 minutes

**Weekly hours**

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Response: How many hours would you say he/she spends [USING MEDIUM] on a typical school day/on a weekend day?

Responses are taken from the child aged 8-11 or 12-15 rather than the parent.

*Note: Parents of children aged 3-7 and children aged 0-15 who use each medium (VARIABLE BASE) - Significance testing shows any change between 2015 and 2016.*
Since the EU Kids Online 2010 survey of 25 countries, our sister project Net Children Go Mobile updated the survey in seven countries in 2014.*

Data from 11- to 16-year olds in 2010 and 2014 (for Belgium, Denmark, Italy, Ireland, Portugal, Romania and the UK) show what they do online on a daily basis.

While they are indeed doing more than before, the ladder of opportunities is as steep as ever.

Children are most likely to engage with social network sites, instant messaging, YouTube and gaming.

They are much less likely to create or upload content, read the news online or participate in virtual worlds.

*Net Children Go Mobile surveyed 9- to 16-year olds in Belgium, Denmark, Italy, Ireland, Portugal, Romania, UK.
Designed to be addictive

“A must read for everyone who cares about driving customer engagement.”

—Eric Ries, author of The Lean Startup

A handful of people working at a handful of tech companies steer the thoughts of billions of people every day, says design thinker Tristan Harris. From Facebook notifications to Snapstreaks to YouTube autoplays, they’re all competing for one thing: your attention. Harris shares how these companies prey on our psychology for their own profit and calls for a design renaissance in which our tech instead encourages us to live out the timeline we want.

This talk was presented at an official TED conference, and was featured by our editors on the home page.

https://www.ted.com/talks/tristan_harris_the_manipulative_tricks_tech_companies_use_to_capture_your_attention
Designed to extract data
Targeted advertising is the business model

Browser sniffing, Browser fingerprinting
‘Flash’, ‘Zombie’ cookies
Geo-location
Device fingerprinting, Device graphs
Social graphs ... & more
98 personal data points that Facebook uses to target ads to you

Proceedings of the National Academy of Sciences of the United States of America

Private traits and attributes are predictable from digital records of human behavior

Michal Kosinski, David Stillwell, and Thore Graepel

Abstract

We show that easily accessible digital records of behavior, Facebook Likes, can be used to automatically and accurately predict a range of highly sensitive personal attributes including: sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender. The analysis presented is based on a dataset of over 58,000 volunteers who provided their Facebook Likes, detailed demographic profiles, and the results of several psychometric tests. The proposed model uses dimensionality reduction for preprocessing the Likes data, which are then entered into logistic/linear regression to predict individual psychodemographic profiles from Likes. The model correctly
Marketing in digital media

Promotional activity in digital media, maximizing impact with novel **creative and/or analytical** methods

- **creative and social methods to activate engagement and implicit emotional persuasion** include immersive narratives; entertainment/ humour; augmented reality, online games and virtual environments; social network engagement (e-Word-of-Mouth); and ‘influencers’ popular with children (e.g., YouTube video bloggers);

- **analytics**
  - **of behaviour**: hone marketing communications and maximize creative impact;
  - **of emotions, responses, preferences, behaviour and locations**: target specific groups, individuals, and moments of vulnerability.

Tatlow-Golden, Verdoost, Oates, Jewell, Breda & Boyland, Public Health Panorama, forthcoming
INBOUND MARKETING

Context Marketing is the New Content Marketing: Are You Ready?

By Karen Taylor  Dec 7, 2015

Buyer ‘personas’
Buyer ‘journeys’
Contextual data

https://www.kunocreative.com/blog/context-marketing-content-marketing
Designed to target = greater vulnerability

Finding Orchids in a Field of Dandelions: Understanding Children’s Differential Susceptibility to Media Effects

Jessica Taylor Piotrowski¹ and Patti M. Valkenburg¹

Abstract
Most youth and media researchers do not believe that media affect all youth in the same manner or to the same degree. While most media effects theories reflect this belief, empirical efforts often do not. Rather than conceptualizing individual differences as noise or nuisance variables, we argue that the future of media effects research lies within understanding these differences. To that end, the aim of this article is to help youth and media researchers identify appropriate moderators for study inclusion. We discuss the concept of differential susceptibility, with a particular focus on the differences between orchid and dandelion children, highlighting theoretical and empirical applications of this susceptibility paradigm to media effects research. We believe that a more integrative approach to youth and media research, built on a differential susceptibility paradigm in which moderators are thoughtfully integrated a priori, can provide us with nuanced answers to the complex questions associated with youth and media effects.

Digital ‘natives’? Problematic concept… and doesn’t confer protection
Aren’t children protected?

- Under-13s:
- Online Behavioural Advertising not permitted

BUT

- Can collect data with ‘verifiable parental permission’

Global Privacy Enforcement Network

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of websites/apps examined which collect one or more pieces of personal information</td>
<td>999</td>
<td>67%</td>
</tr>
<tr>
<td>2. Number of websites/apps for which protective controls effectively limit the collection of personal data</td>
<td>332</td>
<td>31%</td>
</tr>
<tr>
<td>3. Number of websites/apps for which there is an accessible means for deletion of account information</td>
<td>304.5</td>
<td>29%</td>
</tr>
<tr>
<td>4. Number of websites/apps for which sweepers identified concerns</td>
<td>446</td>
<td>41%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of websites/apps which may disclose personal information</td>
<td>561</td>
<td>51%</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Controls</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Number of websites/apps which request some form of parental involvement</td>
<td>365</td>
<td>24%</td>
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<tr>
<td>Number of websites/apps with a parental dashboard</td>
<td>158</td>
<td>14%</td>
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<tr>
<td>Number of websites/apps for which the child could be redirected off the site</td>
<td>861</td>
<td>58%</td>
</tr>
<tr>
<td>Number of websites/apps that tailor protective communications to children</td>
<td>230</td>
<td>22%</td>
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Ethical and legal challenges

- Children’s data
- Public or private?
- Valid consent?
- Sensitive information
- Security of processing
- Withdrawal of data
- Benefits and harms

Tatlow-Golden, Verdooodt, Oates, Jewell, Breda & Boyland, WHO Public Health Panorama forthcoming
Ireland
Top 100 retail brands: 73 food, drink websites

Nearly 1 in 5 have teen appeal
Social media marketing

- Brand Pages – Build a ‘closer relationship’ with social media users
- Ask them to be a ‘friend’/ ‘follow’ / ‘like’ / ‘tag’ others...
- Brand posts appear like friends’ news and updates

- User-generated content
Adolescents’ presentation of food in social media: An explorative study

Christopher Holmberg a, *, John E. Chaplin b, Thomas Hillman c, Christina Berg a

#14 år (14 years)
85% shared food images

68% energy-dense, nutrient poor
21% fruit & veg
**Food brands: Facebook ‘reach’ among young teens (13/14y)**

<table>
<thead>
<tr>
<th>Food/drink Interest entered to estimate potential reach of a youth page in Ireland (13-14y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola</td>
</tr>
<tr>
<td>McDonald's</td>
</tr>
<tr>
<td>Tayto</td>
</tr>
<tr>
<td>Cadbury Dairy Milk</td>
</tr>
<tr>
<td>Ben &amp; Jerry's</td>
</tr>
<tr>
<td>Domino's Pizza</td>
</tr>
<tr>
<td>Pringles</td>
</tr>
<tr>
<td>Subway (Ireland &amp; UK)</td>
</tr>
<tr>
<td>Lucozade</td>
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<tr>
<td>Eddie Rockets Ireland</td>
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<tr>
<td>Supermac's</td>
</tr>
<tr>
<td>Apache Pizza</td>
</tr>
<tr>
<td>7 Up</td>
</tr>
<tr>
<td>Haribo</td>
</tr>
<tr>
<td>M&amp;Ms</td>
</tr>
<tr>
<td>Nando's</td>
</tr>
<tr>
<td>Abrakebabra</td>
</tr>
<tr>
<td>KitKat</td>
</tr>
</tbody>
</table>
**Humour**

**Eddie Rockets Ireland**
I like BIG BUNS and I cannot lie! Tell us your favourite hamburger for a chance to win a €3000 trip to the USA! To enter just fill in an entry form at your nearest diner!

**Ben & Jerry’s**
Remote control, check. Spoon, check. Chocolate Fudge Brownie, check. And relaaaaaaaax!

**KitKat**
Retro or real-life, beat your high-score gaming break with KitKat.

**Food or drink, packaging, or brand logo shown, or none shown**

**Subway UK & Ireland**
#choosetheyoudo! Chicken Piri Piri vs Big Beef & Chorizo Melt you decide!

**Lucozade Energy Ireland**
Get yourself over the midweek hump with a Grafnutri!

**Cadbury Dairy Milk**
Looks delicious right? All you have to do is upload a pic of your favourite #PuddlesRainDance move and we’ll send you one!
Engagement
Emotion
Entertainment

Figure 1: Top techniques used in Facebook food and drink marketing: 18 brand Pages popular with young people in Ireland
Digital marketing impact: Industry research

1. Amplifies TV & other effects
   - reach
   - recall
   - brand likeability (Facebook, 2015)
   70% increase of TV effects (Microsoft, 2013)

2. Greater effects for less spend
   x4 direct return, vs TV (Peterson, 2014)
   x3 recall compared to control groups FB, 14 campaigns (Gibs & Bruich, 2010)
Do teens make informed choices?

Our promise.

At Mars we take our responsibility for marketing our brands appropriately very seriously.

... Marketing Code ... states that we only promote our products to people aged 12 and over as this is the age at which we believe that people can make informed choices about sensible snack consumption.
Are teens interested in digital marketing?

UK 13-17y online (Logicalis, 2016):

- 73% follow brands they like
- 62% click on ads
- 57% make in-app or in-game purchases
- Media-literate but... susceptible to emotional, networked, social effects of advertising
‘Informed choices’?

‘Media literate’ = can recognise ads, understand persuasion and yet...

Adolescent developmental needs

- **Social**: Connect with peers
- **Biological**: More impulsive, more responsive to HFSS ads than adults
- **Identity**: social media, HFSS foods are actively used

Gearhardt et al., 2014; Harris et al., 2009; Harris et al., 2014; Leiss et al., 2013; McCreanor et al., 2005; Pechmann et al., 2005; Fitzgerald et al., 2010, 2013; Ionnanou, 2009; Stead et al., 2011; Trew et al., 2005
Social Influence on Risk Perception During Adolescence

Lisa J. Knoll¹, Lucía Magis-Weinberg², Maarten Speekenbrink², and Sarah-Jayne Blakemore¹

¹Institute of Cognitive Neuroscience and ²Department of Experimental Psychology, University College London

of social influence on risk perception from late childhood through adulthood. Five hundred and sixty-three participants rated the riskiness of everyday situations and were then informed about the ratings of a social-influence group (teenagers or adults) before rating each situation again. All age groups showed a significant social-influence effect, changing their risk ratings in the direction of the provided ratings; this social-influence effect decreased with age. Most age groups adjusted their ratings more to conform to the ratings of the adult social-influence group than to the ratings of the teenager social-influence group. Only young adolescents were more strongly influenced by the teenager social-influence group than they were by the adult social-influence group, which suggests that to early adolescents, the opinions of other teenagers about risk matter more than the opinions of adults.
In social media, young adolescents...

recall and recognise unhealthy food brands more than healthy- or non-food brands
Sheppard, Rooney, Murphy, Boyland & Tatlow-Golden (under review)

Awareness:
The first step in the hierarchy of effects
(Kelly et al, 2015)
In social media, young adolescents...

... would share content and like profiles more that feature food marketing for unhealthy items

Murphy, Tatlow-Golden, Boyland & Rooney (in preparation)

Unhealthy food items – role in adolescent identity
‘Great maturity needed not to fall for it’ - ‘messages from people they idolise’

‘Dishonest’ – ‘immoral’

‘Advertising by stealth’

‘The prizes are things they can identify with and want’

‘They’re much more subtle than first thought’

‘I asked my children if they see much online advertising and they said yes, they did’

3 in 4 felt regulations ‘should apply’ online
Some caveats

Digital advertising: Brands versus bots

Software fraud claims billions of dollars but the industry finds it difficult to stop

The Big Read

https://www.ft.com/content/fb66c818-49a4-11e6-b387-64ab0a67014c

Children want...

Fewer ads 71%
Less fake news 61%
More creative content 55%
More privacy 49%

Children increasingly disillusioned with social media, survey shows

More self-control?

Children of today are better at delaying gratification than previous generations

By Christian Jarrett

If you believed the copious alarmist commentary in the newspapers, you’d fear for the future of our species. Today’s children, we’re told, are more hyperactive and technology addicted than ever before. They’ve lost any ability to sit still, instead craving constant stimulation from digital devices and exhausted parents.

https://digest.bps.org.uk/2017/09/20/children-of-today-are-better-at-delaying-gratification-than-previous-generations/
Growing up more slowly? Less Driving, Alcohol, Sexual activity, Dating, Working for pay, Going out without parents, ... not explained by time on homework, and may not be related to internet use.

Interaction of all these various changes in children’s experience and outcomes has not been explored.
Is the conversation changing?

Why Facebook is in a hole over data mining
John Naughton

It's Mark Zuckerberg's business model that allows Facebook to be manipulated by political activists - no wonder he's in denial about it.

The Switch

Russian propaganda may have been shared hundreds of millions of times, new research says

By Craig Timberg  October 5

Let's take back control of our data - it's too precious to leave to the tech giants
Ravi Naik

Everything we do online leaves a trail. To hold power to account in the digital age, what is required is nothing less than a new civil rights movement
If they are ‘publishers’ they will be subject to regulation
And yet...

Cambridge Analytica isn’t worried about Facebook ad restrictions

‘Facebook is largely the Wild West in terms of regulations,’ targeting firm says

by Russell Brandom | @russellbrandom | Oct 3, 2017, 1:25pm EDT

“Facebook is largely the Wild West in terms of regulations”

SUMMARY: The Issues

- Children’s ‘advertised diet’
  - Even more unhealthy in social media?
  - Targeting creates more vulnerability

- Digital marketing: Engagement, emotion, entertainment
  - Ads grab attention, persuade covertly, subvert media literacy

- ‘Big data’ analytics
  - Amplify power of marketing
  - Target those most vulnerable

- Users’ “choice” is distorted

- Parents unaware

- Researchers’ access denied

- Children’s rights not respected
THE SEARCH FOR SOLUTIONS

• Research methods, ethics and legality remain to be specified in digital media
• Children and young people – what are their practices?
• BUT ... cognitive awareness, attitudes likely to be independent of emotional, unconscious effects of marketing
• Healthy apps, marketing, targeting, social marketing, media literacy – caution required
• **Privacy and targeting:** Why is extraction, storage, sale of personal data and targeted advertising legally permitted for under-18s?

• **Children/youth as knowing subjects** when consuming food, data and digital privacy information. Are they?

• **Differential susceptibility** is critical. Vulnerability is washed out in studies reporting whole-group effects.
Thank you!

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