

Digital food marketing to children and young people

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@AdwarenessS



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CONTENTS

- 01 Food marketing
- 02 The data issue... magnifying harms
- 03 Media literacy – can young people resist?
- 04 Study underway
- 05 Policy approaches: where are we now?

WHO'S FEEDING THE KIDS ONLINE?

Digital Food Marketing and Children in Ireland



Report prepared for the Irish Heart Foundation – 2016



Tackling food marketing to children in a digital world: trans-disciplinary perspectives

Children's rights, evidence of impact, methodological challenges, regulatory options and policy implications for the WHO European Region



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Children's Rights

United Nations Convention on the Rights of the Child, 1989

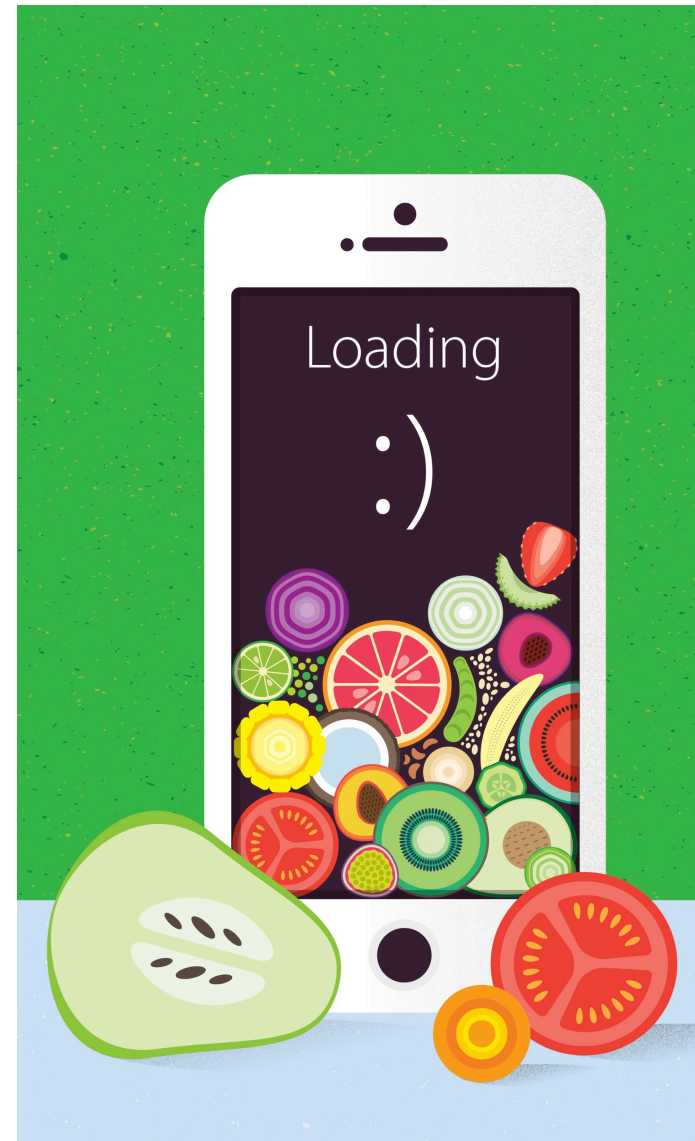
Best interests of the child (Article 3)

Rights

to *protection* of health, of privacy,
& against economic exploitation
to *participation* (also digital
media)

Evolving capacities

States must *support parents* to fulfil
responsibilities (Article 18)



THEMES

- Ambiguous agency
- ‘Big Food’ and the constructions of children and young people’s desires
 - (‘regimes’ of consumption: Cook, 2008)
- Child/young consumer as a knowing subject...?
- The interplay of capacity and vulnerability

Tatlow-Golden M. (2018) Food in children and young people’s lives: Ambiguous agency and contested moralities. In H. Montgomery. and M. Robb, (eds) *Children and Young People’s Worlds*, Bristol, Policy Press

Food marketing

War Room?



Marketing of unhealthy food is effective



Norman et al. *International Journal of Behavioral Nutrition and Physical Activity*
(2018) 15:37
<https://doi.org/10.1186/s12966-018-0672-6>

International Journal of Behavioral
Nutrition and Physical Activity

RESEARCH

Open Access



Sustained impact of energy-dense TV and online food advertising on children's dietary intake: a within-subject, randomised, crossover, counter-balanced trial

Jennifer Norman^{1*}, Bridget Kelly¹, Anne-T McMahon², Emma Boyland³, Louise A. Baur⁴, Kathy Chapman⁵, Lesley King⁴, Clare Hughes⁵ and Adrian Bauman⁴

+46 kcal in snacks
After TV ads &
5 mins adverage

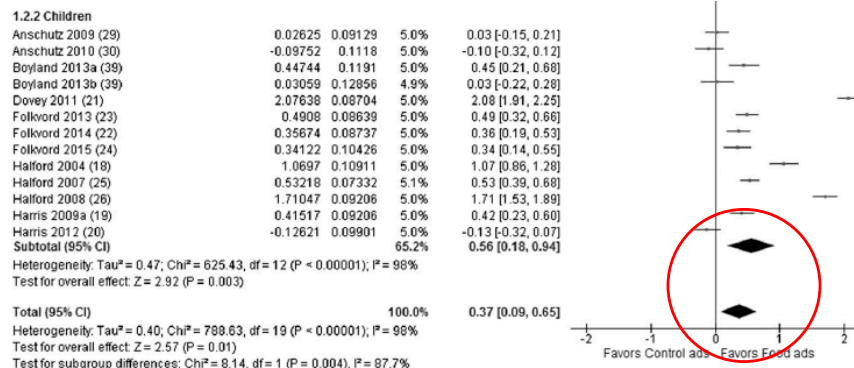


FIGURE 2 Forest plot of subgroup analysis by age of participant (adult and children). An IV meta-analysis with the use of an SMD was used. I² is an indicator of between-comparison heterogeneity. IV, inverse variance; SMD, standardized mean difference.

Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults^{1,2}

Emma J Boyland,^{3*} Sarah Nolan,³ Bridget Kelly,⁴ Catrin Tudur-Smith,³ Andrew Jones,³ Jason CG Halford,³ and Eric Robinson³

³Department of Psychological Sciences, University of Liverpool, Liverpool, United Kingdom; and ⁴School of Health and Society, University of Wollongong, Wollongong, Australia

ABSTRACT

Background: Several studies have assessed the effects of food and nonalcoholic beverage (hereafter collectively referred to as food) advertising on food consumption, but the results of these studies have been mixed. This lack of clarity may be impeding policy action.

Objective: We examined the evidence for a relation between acute exposure to experimental unhealthy food advertising and food consumption.

Design: The study was a systematic review and meta-analysis of published studies in which advertising exposure (television or Internet) was experimentally manipulated, and food intake was measured. Five electronic databases were searched for relevant publications (SCOPUS, PsycINFO, MEDLINE, Emerald Insight, and JSTOR). An inverse variance meta-analysis was used whereby the standardized mean difference (SMD) in food intake was calculated between unhealthy food advertising and control conditions.

Results: Twenty-two articles were eligible for inclusion. Data were available for 18 articles to be included in the meta-analysis (which provided 20 comparisons). With all available data included, the analysis indicated a small-to-moderate effect size for advertising on food consumption with participants eating more after exposure to food advertising than after control conditions (SMD: 0.37; 95% CI: 0.09; 0.65; I² = 98%). Subgroup analyses showed that the experiments with adult participants provided no evidence of an effect of advertising on intake (SMD: 0.00; P = 1.00; 95% CI: -0.08, 0.08; I² = 8%), but a significant effect of moderate size was shown for children, whereby food advertising exposure was associated with greater food intake (SMD: 0.56; P = 0.003; 95% CI: 0.18, 0.94; I² = 98%).

Conclusions: Evidence to date shows that acute exposure to food advertising increases food intake in children but not in adults. These data support public health policy action that seeks to reduce children's exposure to unhealthy food advertising. *Am J Clin Nutr* 2016;103:519–33.

Keywords: children, consumption, food advertising, food intake, marketing

INTRODUCTION

Obesogenic food environments are thought to be a key driver of the obesity epidemic (1). Because of this association, environmental factors that promote unhealthy dietary habits and excess consumption are of public health concern (2, 3). Specifically, the role of food marketing, particularly to children [because of concerns about their comprehension of marketing and its persuasive intent (4, 5)], has been closely scrutinized. Such marketing is extensive, perhaps most notable on television and the Internet, and almost entirely promotes high-fat, -sugar, and -salt foods (6–9). However, despite guidance from the WHO (10, 11) and numerous policy initiatives (12), few countries have enforced effective restrictions in this area (7, 13).

A small number of systematic reviews have sought to capture and evaluate the evidence base that links unhealthy food promotion to diet-related outcomes for the purposes of informing policy action (14–17). These narrative reviews have been in broad agreement that unhealthy food marketing has a detrimental impact on children, although the data relating to adults was deemed too limited to draw firm conclusions (17).

There is a growing body of research that explores the acute experimental effects of unhealthy food advertising [the most prominent form of marketing (4)] on food intake. Such studies are important because they have indicated the potential impacts of exposure to longer-term food advertising, which is more difficult to measure within fully controlled paradigms. Several studies have shown that, relative to control conditions (nonfood advertisements or no advertisements), ad libitum food intake of participants was greater after exposure to unhealthy food advertising in terms of the amount consumed (18–20) and/or caloric load

¹ The authors reported no funding received for this study.

² Supplemental Material is available from the "Online Supporting Material" link in the online posting of the article and from the same link in the online table of contents at <http://ajcn.nutrition.org>.

*To whom correspondence should be addressed. E-mail: boyland@liverpool.ac.uk.

Received July 23, 2015. Accepted for publication December 2, 2015.

First published online January 20, 2016; doi: [10.3945/ajcn.115.120022](https://doi.org/10.3945/ajcn.115.120022).

**18 UK crisp, soft drink,
confectionery brands**

£143m




**Unhealthy
foods are
marketed at
scale**

Marketing spend 2016

<http://obesityhealthalliance.org.uk/2017/10/11/press-release-health-costs-obesity-soaring-junk-food-companies-pour-millions-advertising/>




Appetite 80 (2014) 197–203



Contents lists available at [ScienceDirect](#)

Appetite

journal homepage: www.elsevier.com/locate/appet




Research report

Young children's food brand knowledge. Early development and associations with television viewing and parent's diet[☆]

Mimi Tatlow-Golden^a, Eilis Hennessy^{a,*}, Moira Dean^b, Lynsey Hollywood^{b,1}

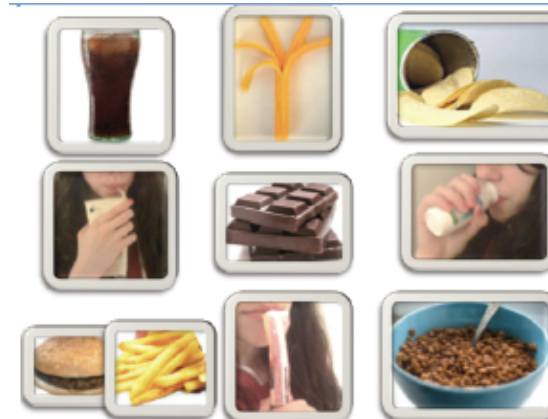
^a School of Psychology, University College Dublin, Belfield, Dublin 4, Ireland

^b Institute for Global Food Security, Queen's University Belfast, David Keir Building, Stranmillis Road, Belfast BT9 5AG, Northern Ireland, UK

 CrossMark

**Matching food
brand logos to
food images at 5y:**

**>90% unhealthy
57% healthy**





Findings – YouTube/TV food ads

< 1 in 10 repeated voiceover

Almost none described overt selling point

Didn't always describe link between story and product

Cognitions:

1/3 – 2/3 identified advertised product

CocoPops, chips, ice cream, smoothie

2/3+ named a food item shown

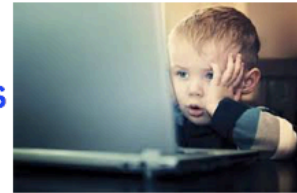
Cookies, milk, potatoes, fruit, cereal

Emotions:

9/10 said they liked ads (every ad!)

Many observable emotional responses

particularly laughter, and responses to jeopardy



**Effects begin
before 3
years of
age...**

Social media: *Economies of emotion* Engagement & entertainment

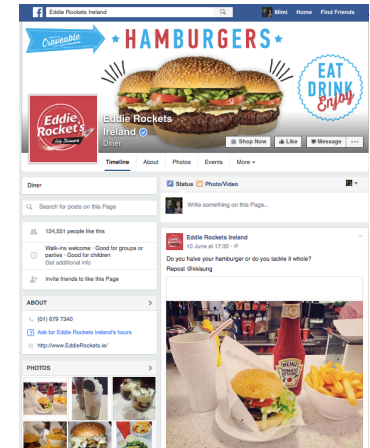
Brand Pages – Build a ‘*closer relationship*’ with users

Ask them to ‘follow’ / ‘like’ / ‘tag’ others...

Economy of ‘likes’, approval, networks...

Almost exclusively unhealthy items/brands

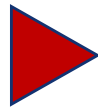
...
and
continue
into the
teens



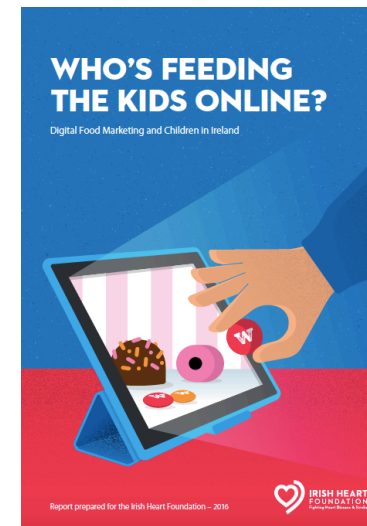
Relative reach of food & drink brands

Of the 117 most popular food and drink brands (retail sales + social media) in Ireland...

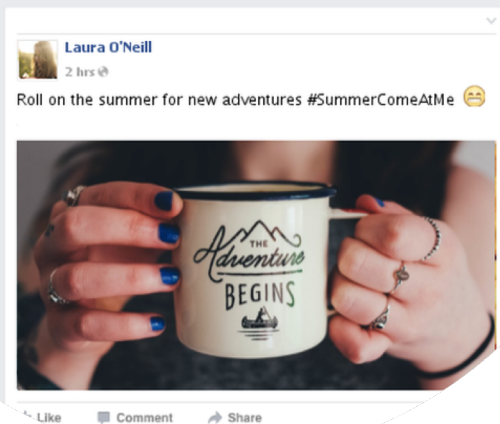
... these brand 'interests' would achieve greatest reach (13-14 years)



Food/drink Interest entered to estimate potential reach of a youth page in Ireland (13-14y)	Potential reach (ranked)
Coca-Cola	1
McDonald's	2
Tayto	3
Cadbury Dairy Milk	4
Ben & Jerry's	5
Domino's Pizza	= 6
Pringles	= 6
Subway (Ireland & UK)	8
Lucozade	9
Eddie Rockets Ireland	10
Supermac's	11
Apache Pizza	= 12
7Up	= 12
Haribo	= 12
M&M's	= 12
Nando's	= 16
Abraakeabra	= 16
KitKat	18



EMBARGOED UNTIL PUBLISHED



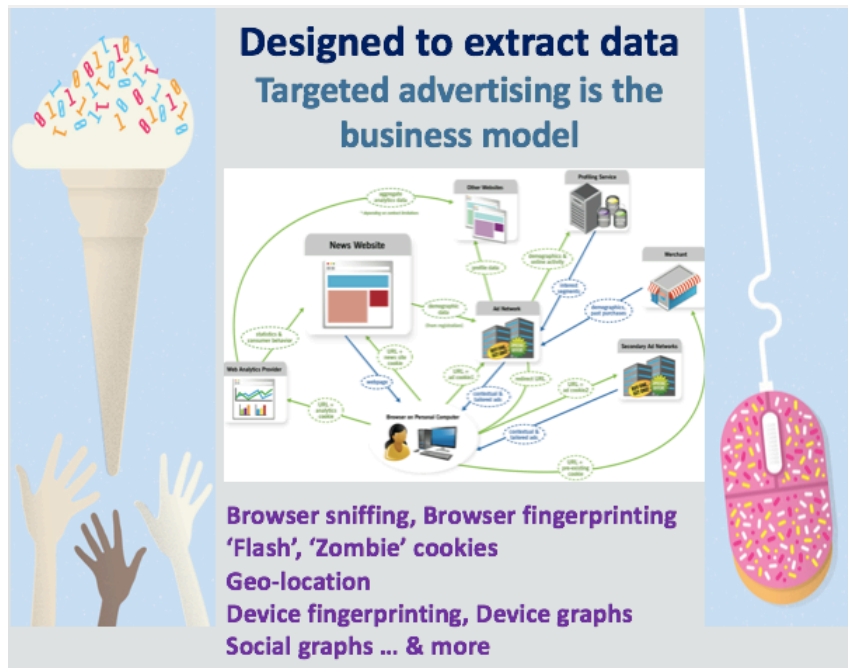
In social media, with integrated ads for unhealthy- healthy- and non-food brands/products, **teens engage most with unhealthy brands**

- Pay more attention (eye tracking)
- Recognise & recall more
- Would share, like more

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

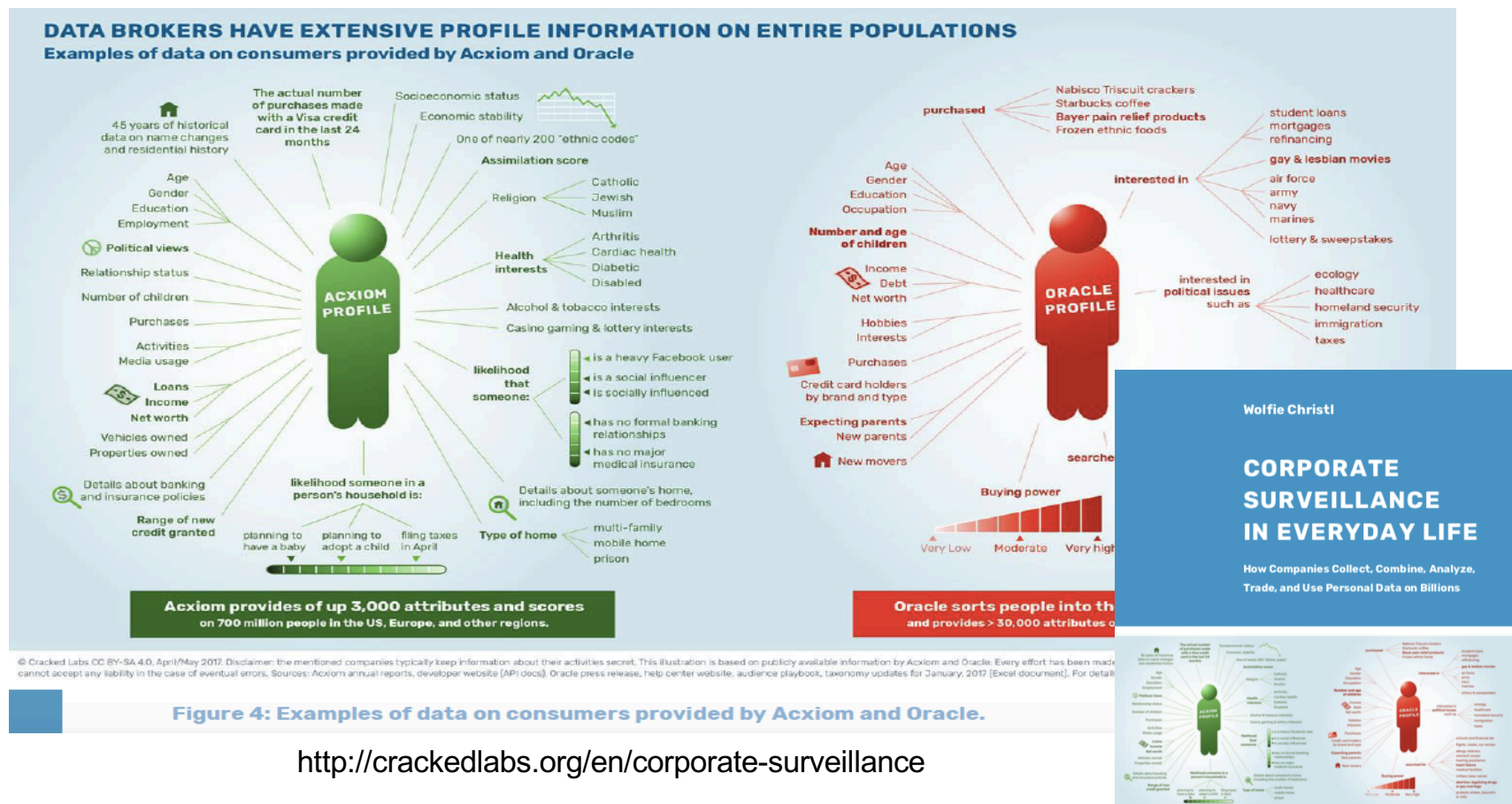
Email me: mimi.tatlow-golden@open.ac.uk

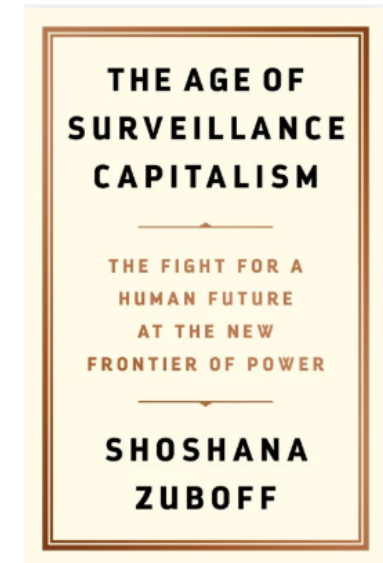
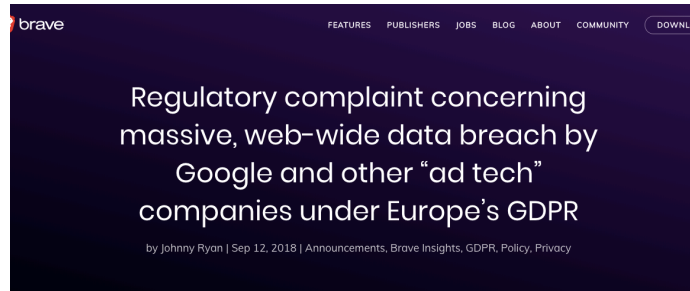
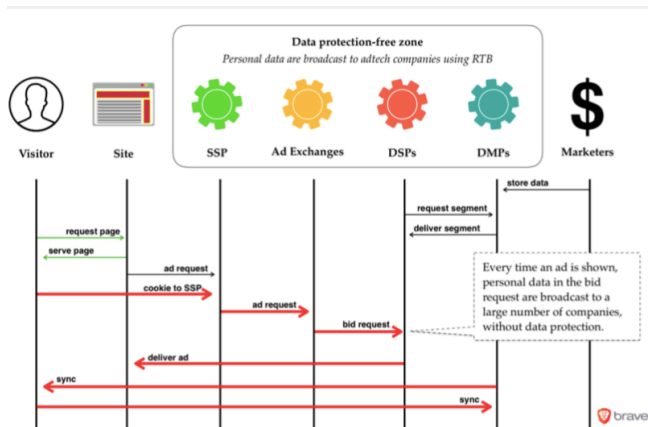
**Data extraction and
persuasive design...
magnifying harms**



...food marketing is enmeshed with data & design issues...
short- and longer-term harms

Adtech surveillance -> magnified vulnerabilities?





The adtech surveillance economy

Adtech: A data protection free zone

Complaint to UK ICO & Ireland DPC <https://brave.com/adtech-data-breach-complaint>

Personalized: psychological traits from digital footprints



Psychological targeting as an effective approach to digital mass persuasion

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Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved October 17, 2017 (received for review June 17, 2017)

People are exposed to persuasive communication across many different contexts: Governments, companies, and political parties use persuasive appeals to encourage people to eat healthier, purchase a particular product, or vote for a specific candidate. Laboratory studies show that such persuasive appeals are more effective in influencing behavior when they are tailored to individuals' unique psychological characteristics. However, the investigation of large-scale psychological persuasion in the real world has

from that displayed in the laboratory (7). Consequently, it is questionable whether—and to what extent—these findings can be generalized to the application of psychological persuasion in real-world mass persuasion (see ref. 8 for initial evidence).

A likely explanation for the lack of ecologically valid research in the context of psychological persuasion is the questionnaire-based nature of psychological assessment. Whereas researchers can ask participants to complete a psychological questionnaire in

“I was surprised that we got the effect with so little information,” said Matz. “We don’t know that much about people, and yet it still has a pretty big effect... if you were using the full Facebook profile to make individual level predictions about people’s personalities, the effects would be even bigger.”

<https://www.theguardian.com/science/2017/nov/13/facebook-likes-targeted-advertising-psychological-persuasion-academics-research>

3 real-world experiments, 3.7 m people

Digital amplifies other channels

Digital marketing impact: Industry research

1. Amplifies TV, other effects

- reach
- recall
- brand likeability (Facebook, 2015)

70% increase of TV effects

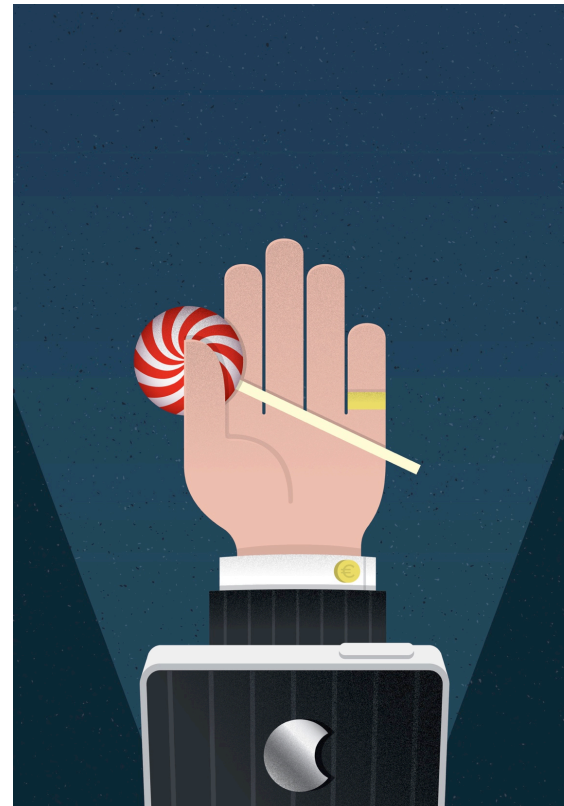
(Microsoft, 2013)

2. Greater effects, less spend

x4 direct return, vs TV (Peterson, 2014)

x3 recall compared to control groups

FB, 14 campaigns (Gibs & Bruich, 2010)



Media literacy – can young people resist?

Media Psychology, 14:333–354, 2011
Copyright © Taylor & Francis Group, LLC
ISSN: 1521-3269 print/1532-785X online
DOI: 10.1080/15213269.2011.620540



Reconsidering Advertising Literacy as a Defense Against Advertising Effects

ESTHER ROZENDAAL

*Amsterdam School of Communication Research, University of Amsterdam,
Amsterdam, The Netherlands*

- Advertising interventions can increase advertising literacy
- BUT
*there is little evidence to suggest that an increase in
advertising literacy indeed leads to reduced advertising
effects*
- The difference between *having* and *applying* knowledge
- (Rozendaal et al, 2011)

Minors' advertising literacy in relation to new advertising formats

Identification and assessment of the risks

Advertising literacy – new media

- Children 9-11y: can understand tactics, though struggled with concept of *unconscious persuasion*
- Teens: if *more* advertising literacy, contested advertising *less*
- Peer communication among teenagers in social networking sites leads to lower cognitive advertising literacy
- Almost no research on advertising literacy in new media




research report in the framework of the AdLit SBO project



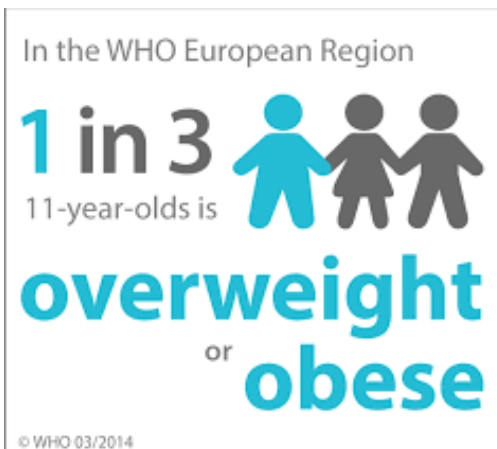
Article

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

Jessica Taylor Piotrowski¹ and Patti M. Valkenburg¹

American Behavioral Scientist
2015, Vol. 59(14) 1776–1789
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DOI: 10.1177/0002764215596552
abs.sagepub.com


**No evidence
for media
literacy
protection**



Differential susceptibility Piotrowski & Valkenburg (2015)

- Consistent pattern of small effect sizes - washing out susceptible groups?
- Who are the children most affected by food advertising in digital media & under what conditions?



In progress...



The Adwareness Study

@AdwarenessS

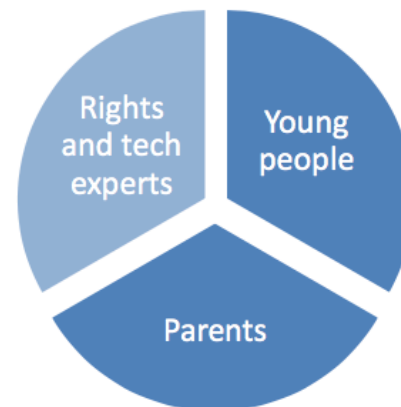


Researcher: Magdalena Muc da Encarnacao

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 @EmmaBoyland

Digital food marketing in the surveillance economy What do key stakeholders know and think?




FOCUS GROUPS @6
Young people (n=38; 6
males; 13-17y)
Parents
(n=25; 4 males)
North-West England &
MK

“Food ads? Not really”

Almost Famous Liverpool
23 November 2015

YEAH, THAT'S RIGHT!
CHRISTMAS HAS COME EARLY!
Think you've got what it takes to devour these festive wonders?
TO WIN A SPECIAL REAST - You just gotta LIKE, SHARE & TAG someone you would share these 'Belly-Buster' specials with!
SANTA'S CALLING THE SHOTS!
So, have you been good boys and girls this year...?




Like Comment Share

Red Bull UK Retweeted
Myzak @Myzak · Jun 30
Captain @RedBullUK takes to the Thames today as curator of a boat on the @RedBullMusicUK Odyssey


Catch her on the Wine Up boat alongside our good friends @EquinoxMusic, @Rheavacrum, @Iamamadeo, @UKCIS, and @SwingTing

redbull.com/gb-wineupmusic/...



Like Comment Retweet

YouTube




Filming in London & Family Portrait Ad
890 649 views
47 TYS 325 100STPNUJ

PointersallVlogs @PointersallVlogs · 14 Jun 2015
SUBSCRIBE 4 M N


Red Bull UK @RedBullUK · Jun 30
Go on @morgan_a_lake 🍷🍷🍷

ALEXSTERN @Alex_Stern · May 5
Thanks @tacobell for this Cinco De Mayo snapchat filter 🌮🍷🍷
DREAMS DO COME TRUE.



Like Comment Retweet


Premier League @PremierLeague
#PL clean sheet No.18 of the season means @D_DeGea wins his 1st @CadburyUK Golden Glove award 🏆



1,197 PPL · 13 May 2018
7,275 Retweets 18,346 Likes

Manchester United David de Gea and Cadbury UK

Athletics Weekly @AthleticsWeekly
Morgan Lake has won the #BritishChamps high jump gold and has now cleared 1.57m!



Like Comment Retweet



How did I get it?

Is it **cookies** or something?

It adapts to **what you like**

If you've **searched** for similar things

If you're **following** specific people

You and your friends: it's targeted to
a **similar age group**

They know my **gender**

If you get McDonalds **wifi** you get
McDonalds adverts

If I **live near** that shop

The next day it'll pop up on your
Instagram, and you're like **they've
been listening to you**

Quite good in the fact that you're **not
getting pointless adverts**



That's well dodgy

'Weird' - 'Creepy' – 'That's well dodgy'

A global problem

it's harder now, because it's such a worldwide thing it couldn't be like, 'well our government will decide' because ...there's not a huge worldwide body, there's like a few bodies but not all countries are part of, we've got the EU and then United Nations, but not all countries are part of these things

We should have control

We should just be able to choose what we want, on our own thing.

Yeah, because it's our thing, it's what we're using, so it should be us, really, who decide what's on it, we should say.

We should have more control, because I feel like we've got literally no control over what's happening. And it's our data

International policy recommendations

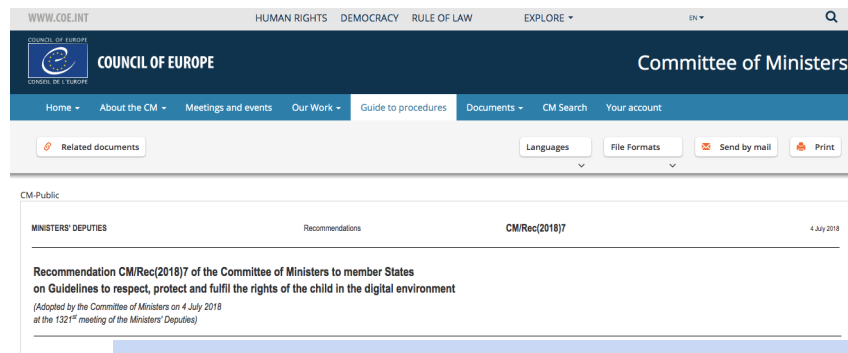
UN Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health 2014

States should “adopt laws that prevent companies from using insidious marketing strategies”

WHO Set of Recommendations on the marketing of food and non-alcoholic beverages to children 2010

WHO Ending Childhood Obesity (ECHO) Commission Report 2016





37. Profiling of children, which is any form of automated processing of personal data which consists of applying a “profile” to a child, particularly in order to take decisions concerning the child or to analyse or predict his or her personal preferences, behaviour and attitudes, should be prohibited by law.

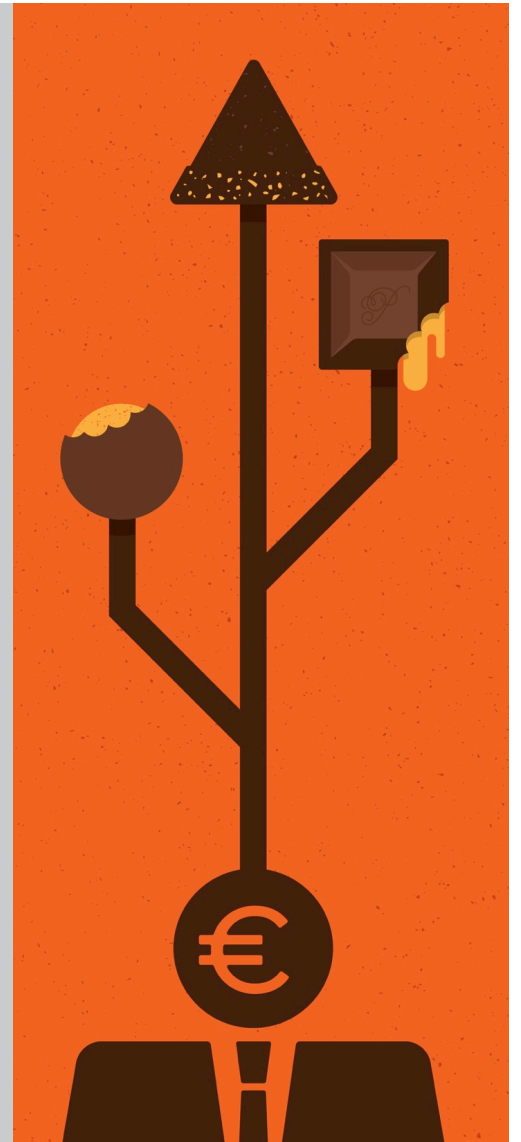
4.3 Establish a European Strategy for Better and Safer AI for Children...
empower children, while also protecting them from risks and potential harm.
... grow and learn untouched by unsolicited monitoring, profiling and interest invested habituation and manipulation. Children should be ensured a free and unmonitored space of development and upon moving into adulthood should be provided with a “clean slate” of any public or private storage of data related to them. Equally, children’s formal education should be free from commercial and other interests

Ireland: Data Protection Act 2018 Profiling and microtargeting...



SUMMARY

1. Unhealthy foods marketed at scale, effectively
2. Effects begin before age 3...
3. ... and continue into the teens
4. Surveillance, design amplify effects...
5. Data extraction, persuasive design ...
6. Digital amplifies other channels
7. No evidence that media literacy protects
8. Young people: adtech ecosystem is 'well dodgy'
9. Urgent need for policy action



thank you!



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