Pavlov's Kids

Paul Biegler

Is junk food advertising conditioning a generation of fat children?

As the Abbott government acts to close down the Australian National Preventive Health Agency, a statutory body with responsibility to develop policies to address childhood obesity, consumer psychology is providing new insights into how advertising gets kids to eat. This new research is nowhere to be found in the deliberations of Australian policy makers, neither the politicians committed to small government and 'self-regulation', nor even those more sympathetic to regulation. Policy making remains weighed down by an antiquated view of how marketing persuades.

In a 2008 op-ed in *The Age*, the Institute of Public Affairs' Chris Berg painted the standard picture of what an advertisement does:

> Advertising is, at its core, just the simple delivery of information. Those who oppose it are essentially arguing that this information is too challenging for individuals to process safely; that, if told the wrong thing, they will be unable to resist self-harm.

The Australian Food and Grocery Council, which coordinates advertising self-regulation, is sympathetic to this view. In 2012 its Chief Executive, Gary Dawson, told *Lateline* that 'The irony ... is we've never had more information available about good nutrition and about healthy lifestyles ... But the common sense rule stays the same: eat things in moderation, get exercise'.

Berg's position is to be expected from an avowed libertarian and free marketeer whose employer has deep conservative ties. But he is partly right. Ads sell products by creating awareness. And people with the requisite critical skills can make up their own minds about advertising claims. But advocacy groups point out that kids under seven don't even understand that ads have commercial or persuasive intent. And the 'requisite critical skills' to dismember the puffery don't emerge until age eleven. In its Senate submission the Obesity Policy Coalition said children were vulnerable because they 'lack the mature cognitive ability necessary to comprehend advertising messages and assess them critically'.

And this is precisely how food manufacturers want the conversation to run. If the public believes ads persuade with claims their children are too young to critique, industry has a tailor made retort: 'We'll work really hard to make all our claims defensible'. This version is convenient for Big Food because it distracts attention from how advertising actually persuades.

Back in 1934 you could forgive Kellogg's for selling Corn Flakes with the lines 'Kellogg's are rich in energy, easy to digest. A nourishing lunch or supper for children. Economical too and so easy to serve!' Eighty years later, any marketer knows you don't build brands with words. You do it with feelings. And once a brand sets off emotions, you won't get them back in the box just by thinking hard, whether you're seven, eleven or seventy-seven. This is a problem for a self-regulation model that focuses on overt product claims. Well-constructed ads will just persuade with techniques that escape the regulator's framework. I can claim my own slice of knowledge on the subject. Until recently, in research I was conducting, I used these methods to get people to like drugs.

In 2010 I started a research fellowship on pharmaceutical advertising at Monash University. One still autumn morning, Melbourne blanketed in smog haze, I was gazing from my ninth-floor window as a hopeful prelude to work. The concrete landscape was interrupted only by sparse greenery and a crane adding to the array of squat campus buildings. But an arrival to my inbox added considerable colour to proceedings. The email, from Margaret Bradley and Peter Lang at the University of Florida, had the unprepossessing title 'International Affective Picture System' (IAPS).

I had been waiting for the IAPS with growing impatience and ignored my other mail to open it. As I scrolled through its more than 1000 photos, I paused here and

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there to let out a chuckle or, under my breath, an 'ahh' or a 'cuuute'. But one image gave me cause to pause longer. My door was ajar and I heard the murmur of two philosophy colleagues approaching. It would have been, er, uncomfortable if they had happened to glance in just then. I rose quickly and pushed the door shut. On my desktop was a doe-eyed beauty in full eighties soft focus. Ensconced on a vermillion chaise she stared downwards, her face partially obscured by a frizzed coif. Glistening breasts emerged from a loose peignoir. One leg was raised revealing her object of interest. Razor poised, she was shaving a strip of luxuriantly dark pubic hair.

This was not my usual academic fare. My bread and butter was densely worded philosophical screeds and the latest musings from the *Journal of Consumer Research*. I leaned in closer to see what else these Florida academics were offering. There were gleeful kids splashing under a waterfall, baby cheetahs in a cuddle and lovers stealing a lunch-time embrace in the city. But there were also crash victims whose pallor contrasted with blood and bitumen, the grimacing head of a corpse frozen in escape from a razed building, and toilets overflowing with impossible volumes of liquid faeces.

Bradley and Lang had amassed images that elicited feelings across the spectrum. Their collection has become the stock in trade of psychologists manipulating how people feel, especially about branded products. One of those leading the charge is France-based psychologist Steven Sweldens. In a recent interview aired by his University INSEAD, Sweldens deftly expounds on how advertising sells its wares, including, among others, beer.

In 2010 his team showed people pictures of beer bottles with unfamiliar Belgian labels. Some were superimposed over feel-good images taken from the Florida database: a cuddling couple, a bronzed water skier and a sailor on the trapeze. Other beers had ho-hum pictures in the background: a man reading a newspaper on a park bench, two salarymen asleep on the Tokyo subway. The beers paired up with the pleasant images were voted hands down more appealing and buyable than those attached to the neutral variety. Of course most people are aware that advertising creates such positive associations. But just how sophisticated that process has become is less widely appreciated. Sweldens' study was an example of 'evaluative conditioning', a force driving consumer behaviour whose pedigree can be traced to Russian physiologist Ivan Pavlov.

Pavlov's seminal interest was digestion in dogs. He implanted drains in the animals' cheeks to measure how various foods altered salivation. But during these early experiments Pavlov noticed something curious. The dogs would salivate when they saw the white-coated lab assistants who carried the food. Pavlov concluded that drooling was not just an automatic reaction to food, but could also be learned in response to things the dogs associated with food. Lab coats, metronomes, whistles, tuning forks, the famous bell and (points deducted Ivan) electric shocks could all trigger salivation via Pavlovian conditioning.

Humans share eighty per cent of their DNA with dogs, and a lot of physiology, so it's not surprising we're easily conditioned too. Give people a mild electric shock and they'll sweat as part of the fight and flight reaction. Sound a tone just before each shock and after a while the tone will make them sweat just as much. But it's less intuitive that we could be conditioned to *feel* things. Sweldens' study, and many others like it, shows we should resist our intuitions on this one. If you are a garden variety human you will feel good when you see puppies, waterfalls, sunsets and pornography. Pair those over and over with a beer you have never heard of and you will start feeling good when you see the beer all by itself. And when a product makes you feel good you're much more likely to buy it.

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But Sweldens wasn't so much interested in whether people could be conditioned to prefer Antwerp Blonde over Belgian Angel Stout. What he really wanted to know was whether people could *resist* being conditioned. And so he advised some volunteers to ignore the pictures, reminding them that they added no useful information whatsoever. What Sweldens found is disconcerting for anybody who thinks that teaching people media literacy will protect them from branding. The advisory had almost no effect on the positive conditioning achieved with the happy images. If you are trying to alter attitudes, Sweldens' study tells us that when good feelings tussle with a thinking brain, feelings will carry the day. This is happy news for advertisers.

So, children generally don't drink beer. But they can make disappear, literally, a bucket-load of soft drink. So much, in fact, that soda laden with high-fructose corn syrup has been judged the single greatest caloric contributor to childhood obesity. But would advertisers really set out to condition kids to like soft drinks?

At this point I will put my hand up and confess: I am an American citizen. Born, though, not bred. My family's first Melbourne car was an EK Holden Special. In the seventies my mate and I slipped into VFL matches at Windy Hill with root beer in a vinyl school bag. At half time we bought lukewarm Four and Twenty pies and the *Footy Record*. So I'm Aussie. But on Monday mornings in the gym at Glendover Elementary School in Lexington, Kentucky, bleachers behind, basketball hoops to the side, I had done the same as everyone else in the USA. We sang 'America the Beautiful'. The song still gives me goose bumps, even if I'm not quite tempted to put my hand on my heart as was the custom back then. I know this because I have just heard a stirring rendition on YouTube.

More than 111 million people saw Coca-Cola's 'America is Beautiful' ad when it aired in February during the NFL Superbowl. I'm certain plenty of them had neck hairs at attention like me.

This ad is masterful. The visuals pin down, with sniper-like precision, the kind of American iconography that twangs heart strings every time. A cowboy astride a Palomino paces through a forest of conifers with a snow-capped Sierra as backdrop. Kids gaze out and point at the sights on a road trip through the horsts of the American Southwest. Teenage surfers bob in the west coast swell at sunset. African American kids rap on the urban block. All the while 'America the Beautiful' comes at you, sung by seven different children, and in seven different tongues, including Spanish, Hindi, Senegalese, French and Hebrew. It is a challenge to hear it and not be moved.

The soundtrack and visuals are Madison Avenue's equivalent of the IAPS. And the nationalistic spine tingling is designed to rub off on the Coke brand, which is subtly inserted at regular intervals. The rap boys have an esky emblazoned with the Coke logo, kids dive for Coke lids at the bottom of a pool, the backdrop to a handball game in the 'hood is a faded vintage Coke sign.

There is not a single statement about Coke—that it tastes good, that it quenches thirst. Nothing. In fact the only written material is in fine print telling you that Coke and 'open happiness' are trademarks. Oh, and #AmericaIsBeautiful. This, Mr Berg, is not the simple delivery of information. This is conditioning and it forms neuronal connections between brain regions associated with Coke and those associated with pleasure. We know this from a study led by Samuel McClure in Houston a decade ago.

McClure's team at the Baylor College of Medicine was interested in how the Coke brand impacts on impressions of the drink itself. So they put people in an MRI scanner and squirted Coke into their mouths. Coke was preceded either by a 'neutral' flash of light or by an image of a Coke can. Not only did the can's branding regalia make Coke taste better but an entirely different brain region lit up: the one controlling emotions. Advertising had bred emotional associations so profound that it altered both flavour perception and brain activity. The findings reverberated through the water coolers of neuroscience faculties around the globe.

People who view the 'America Is Beautiful' ad will form those associations and it will happen unconsciously. And whatever your minority background, if you are an aspirational American, Coca-Cola invites you to be part of the action. If you are a child who has hit the magic age of seven or eleven, in fact, no matter how clued up you are, there is very little you can do about it. But all ads work like this now and they affect adults and children alike. So why should this technique worry us so much in the case of children? To find an answer, we should look to another children's favourite: the bicycle.

In 2010 the British Medical Association made an announcement that triggered much hand wringing among libertarians. The BMA had decided that Britain should follow countries like Finland, New Zealand and Australia in legislating the mandatory wearing of helmets by adults on bicycles. Lovers of wind in hair cried foul across Old Blighty. And they sought support from nineteenth-century British philosopher and economist John Stuart Mill. Mill argued that we are all better off should people in the 'maturity of their faculties' be allowed to decide what is good for them.

For this reason most liberal democracies are loathe to stop people hurting themselves in the variety of highly creative ways that they often do. Hang gliding and skydiving come quickly to mind. Mill thought that once we start deciding what is good for others we will get it wrong more often than not. Mature British cyclists were convinced the BMA had not only got it wrong for them but also crossed Mill's Rubicon of liberalism in the process.

However, Mill was happy to concede that children do not count. Their faculties are a long way from maturity and so we tend to take choices about risk away from them. When a person is not competent to decide what is best for them, someone better placed must step up to the plate. That's why the British government had already made bike helmets compulsory for children. This wasn't meddling nannyism but justified state paternalism. The libertarian comeback is that parents should be the ultimate stewards of children's behaviour. But when it comes to bike helmets many parents will take the soft option, literally. The horrors of brain injury are such that governments make a justified appeal to 'parens patriae', enforcing helmets for kids in their role as Supreme Guardian.

The parallels with junk food advertising are hard to dismiss. Advertisements promote harmful consumption by creating positive attitudes that are largely irresistible. Children cannot competently consent to expose themselves to this noxious influence and its downstream

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harms. Somebody needs to keep them safe. But many parents, no matter how well intentioned, will simply not deny children their favourite shows, with the attendant barrage of advertising. The harms of obesity make the justification for advertising regulation as compelling as that for bike helmets.

A number of developments make this action urgent. Other persuasive modes are rapidly supplanting the dominance of television. These include sports sponsorship, websites, social media 'skins' that brand Facebook and Twitter pages, viral marketing and celebrity endorsement. But advergaming has perhaps the greatest potential for evaluative conditioning.

Take Fanta Funstigator, a smart-phone app featuring the soft drink Fanta characters. I played Jetski Jumprider. You scoot fast across a turquoise sea. There are palm-fringed atolls and a sky with scudding clouds. The aim is to avoid a bunch of blue buoys and seek out slivers of orange that double as launch pads. Hit an orange and you are suddenly airborne. Those pesky buoys recede to harmless dots beneath you. The music is upbeat and kind of mind-dimming.

Disturbingly, it is fun. I say 'disturbingly' because this is such a potent way of evoking positive feelings compared with a non-interactive ad. A television commercial lasts thirty seconds, but kids play games for hours. Concerns about advergaming have led marketing professor Agnes Nairn to call for restrictions to extend to this realm. Indeed the Australian Food and Grocery Council's voluntary code was extended to cover interactive games in January 2014. But the Obesity Policy Coalition has complained that the Code's wording makes it simply 'window dressing', saying nine out of ten complaints are dismissed by the Advertising Standards Bureau.

But libertarianism isn't finished yet. Chris Berg argued in his op-ed piece that 'Kids will always like junk food. Any parents who think that a government ban will make walking up the chocolate aisle less stressful are deceiving themselves'. But no one is suggesting these preferences be eradicated. That feat would mean subverting our evolutionary hardwiring to eat sugar and fat. The aim is not to eliminate but to reduce consumption.

Parents are painfully aware that every time a child is exposed to a brand their conditioned attitudes re-surface. Who hasn't witnessed a meltdown in aisle three at Woolworths? Thanks to pervasive integrated marketing campaigns those exposures happen frequently. Kids are wired to pester their parents and nature dictates they pester especially hard for survival basics like food. Marketers have been hugely successful at refining those preferences towards foods that generate most profit. Junk foods dominate this category because high-fructose corn syrup is cheap and our sugary predilections robust. These are the wants upon which parents are most often called to adjudicate.

Parents are predisposed to give in to their kids. Up until the last few decades a parent's main goal was to stop their child becoming malnourished, not obese. For the vast bulk of human history parents' acceding to food requests could only help their children. We should forgive parents who think it is in their children's interests to get at least part of what they crave. We know that most parents will capitulate at some point. It may not be today. But when treat time rolls around a cheeseburger, chocolate bar or Slurpee is likely to be on the list. When parents reward children with unhealthy food those products are reinforced as a proper response to good behaviour or hard work. And so those foods enter the family's life rhythm.

They say the hand that rocks the cradle rules the world. Unless we loosen the grasp of junk food marketers the cradles of our new world could lead increasingly to an early grave. The lesson of consumer psychology is that we can protect kids by limiting their freedom to watch junk food ads. The threat posed by obesity makes it urgent that politicians across the divide are listening.

Useful resources

Chris Berg, Institute of Public Affairs: ‹http://www.theage.com.au/news/opinion/nanny-state-ad-bans-wont-stop-kids-liking-junk-food/2008/03/22/1205602721015.html›

Gary Dawson, Australian Food and Grocery Council Chief Executive: http://www.abc.net.au/lateline/content/2012/s3621226.htm

Senate report: ‹http://www.aph.gov.au/binaries/senate/committee/clac_ctte/protecting_children_junk_food_advert/report/report.pdf›.

Interview with Steven Sweldens: ‹http://www.youtube.com/watch?v=W4cx331qhz0›.

Sweldens in the *Journal of Consumer Research*: ‹http://www.chilleesys.com/scp/assets/vanOsselaer.pdf›.

A meta-analysis of evaluative conditioning studies: ‹http://users.ugent.be/~jdhouwer/ecmeta.pdf›.

Coca-Cola's America Is Beautiful ad: ‹http://www.youtube.com/watch?v=443Vy3I0gJs›.

Samuel McClure and colleagues' study: ‹http://labs.vtc.vt.edu/hnl/articles/Read/McClureLi2004.pdf›.

Agnes Nairn on advergaming: ‹http://www.agnesnairn.co.uk/policy_reports/advergames-its-not-childs-play.pdf›.