

More Than a Game: A Look at the Impact of Advergaming on Children

Kyle McCabe
University of California, Santa Barbara
Dr. Baillargeon
Writing 50

Advertisements can be found almost anywhere. Simply examine your surroundings, watch a broadcast of your favorite show, or log onto Facebook to see what's going on today, and you'll be hard-pressed to avoid some form of a promotional ad. Just in America's public space alone, there are over 158,000 bulletin billboard advertisements and over 200,000 ads found on the sides of metropolitan busses (Outdoor Advertising Association of America, 2013). According to a survey conducted by the market research firm Yankelovich (2007), the average person living in a city sees up to 5,000 ads daily—a statistic that's up 250% since the 1970s. This noted increase is reflected by over half of the respondents surveyed who said they feel marketing and advertising today is “out of control”. Concerns regarding the ubiquity of advertisements today have become a public issue, especially when they're directed towards children.

What makes children so special? The short and simple answer: their money. Children are a hot target for advertisers because recently they've become a lucrative demographic. To give a basic sense of the money being discussed here, in 2003 alone, 33 million American kids aged 8-12 each spent nearly \$103 a week (\$5,370 per year) on consumer products (Calvert, 2008). The targeting of youth consumers is extremely prevalent in the food and drink industry, not by organic companies that encourage kids to buy healthy, hormone-free and environmentally friendly food, but by corporations that market sugary, fatty, and high calorie products. Of the \$200 billion spent by children and youth consumers, the four leading categories in sales were candy and snack foods, soft drinks, fast food, and cereal (The Institute of Medicine, 2006). These foods and drinks are primary links to both the obesity epidemic and the increased prevalence of childhood type 2 diabetes, which are important and highly relevant issues in America today.

The close relationship between advertiser and child has developed thanks to the internet. Due to its popularity and immensity, the internet allows advertisers to market their products to

children directly via specific mediated websites that limit parental oversight. Subtle and creative methods of online advertising known as “stealth advertising” are employed to connect producer with consumer. The goal here is to market a product in such a way that the viewer has limited to no cognition that a persuasive message is being presented. For targeting children, stealth advertising is carried out most commonly through the fusion of consumer products with online games, which have come to be known colloquially as “advergames”. These games are an invaluable marketing resource for promoting and reinforcing brand visibility and loyalty.

Researchers have found that repetition is crucial in advertising to children as it increases requests for, and purchases of specific food, beverages, and toy products (Moore, 2006). A content analysis of 60 (n=60) online flash games from branding gaming and entertainment publisher Funtank’s popular website candystand.com was conducted to examine the extent to which brands and products are propagated to children (see Appendix A). This study looked at what contributes to brand recognition and persuasion for children by analyzing the type of product being shown and distinguishing visual characteristics such as the product name, the color scheme used, and the presence of a branded character. When considering the recognizability of the brands being advertised, I used BranDirectory’s Global Top 500 brand list for 2013 as a barometer, figuring these brands would be considered almost universally recognizable. Remarkably, nearly 65% of all the ads viewed belonged to a member of the Top 500 brand list. By far the most popular of the categories, unhealthy foods (candy, cereal, snacks, and fast food) and beverages (sodas) constituted a substantial presence in the ads viewed. My findings have shown that advergames are being used by food and drink marketers, including the industry’s best, to target and exploit children’s purchasing habits at an age where their mental faculties are not developed fully enough to distinguish between entertainment and advertisement.

Advergaming is used as a vehicle for product publicity, as well as a feedback system for gathering consumer spending information. In order to better serve the public, we must inform legislators about these insidious games and encourage them to draft legislation that will safeguard against greedy advertisers.

DIGGING INTO MINDS AND WALLETS

To sell a product you have to know your buyer. Advertisers who target kids focus their time and energy on determining the most efficient types of ads that lead to consumer purchases. A solid comprehension of age-based psychological development is paramount for understanding what makes children tick at different stages growing up. In addition to understanding internal motives, advertisers also consider the external economic landscape that enables children to purchase the things they desire. By examining children of all psychological levels of development and the availability of spendable capital, advertisers are able to curtail the content and format of their ads to best foster product desirability and profitability.

Physiologically along with psychologically, children's brains are in a continuing stage of development during childhood. Developmental psychologists and researchers in marketing and communication often apply Jean Piaget's stages of cognitive development to explain the differences in how children comprehend advertising content (Flavell, 1963). Preoperational thought, the first stage characteristic of children ages 2-7, involves perceptually binding and liking a product based on how it looks. The items that have a visual or emotional appeal are often the ones remembered and desired. These young kids also tend to use animistic thinking, wherein they have trouble distinguishing imaginary events and characters from the real world (Calvert, 2008). This form of thinking is the reason why many kid-oriented food and beverage companies use branded characters in their commercials. By embroiling children into the story of Toucan

Sam's quest for the amazing smell of Froot Loops to scoffing at the Silly Rabbit trying to steal a bowl of Trix, advertisers are slowly but surely establishing brand loyalty. Results from the content analysis revealed that out of the 24 ads referencing foods or beverages, 14 (58.3%) involved a trademark branded character. Advertisers understand that this preliminary developmental stage offers major long-term profitability by establishing brand loyalty early on.

Concrete operational thought, developed typically between ages 7-11, allows for children to move beyond the information given by advertisers to grasp that the intent of advertisers is to sell a product. By the last stage of formal operational thought, around age 12 and up, teens can understand and logically reason the intent behind advertisers to the point of growing cynical about the field (Robertson & Rossiter, 1974). Products and messages that are typically advertised to people falling into this third category are those that involve a certain level of rational complexity and reasoning, including automobiles, cellular devices, and political ads. Therefore, it is of no major surprise that the content analysis failed to reveal a strong presence of such products, with automobiles (n=5) being featured in only 8.3% of the ads viewed, and cellphones (n=2) only 3.4%. These results indicate that the developmental stage is the drop off for effective advertising to children.

Moving from the psychological to the economic factors, children play a major role in market consumerism. Thanks to greater disposable incomes and more purchasing influence on their parents, children have more money and spending power now than ever. To compare, the purchasing power of a child today has grown to over six times that of children during the 1960s (Palmer, 2003). In 2002 alone, 2-14-year-olds influenced the spending of over \$500 billion a year in household purchases (Calvert, 2008). According to marketing experts, repetition of ads is the single largest factor influencing children's impact on household spending; kids will pester

parents to buy recognizable products and will tend to either get upset or throw tantrums when they aren't rewarded (Schor, 2004). Dan Cook, Assistant Professor of Advertising and Sociology at the University of Illinois, puts it best when he says,

Observe a child and parent in a store. That high-pitched whining you'll hear coming from the cereal aisle is more than just the pleadings of a single kid bent on getting a box of Fruit Loops into the shopping cart. It is the sound of thousands of hours of market research, of an immense coordination of people, ideas and resources, of decades of social and economic change all rolled into a single, 'Mommy, please!' (Cook, 2001)

Following this consumer spending trend, it is no surprise that advertisers are now shelling out money in order to get their brands out to young, new consumers. In 2004 alone, total US marketing expenditures from food and drink companies were estimated at some \$15 billion to target products towards children (Institute of Medicine, 2006). Due to regulations set by the Federal Communication Commission (FCC) stipulating the amount of time allowed to advertise on television, a growing fraction of this spending is occurring in the online sector. Because posting ads online is much cheaper than doing so on television, marketers and advertising agencies are flooding cyberspace to reach out to consumers. Advertisers looking to profit from children have applied their understanding of developmental psychology to arrive at the pinnacle of online advertising—advergaming.

THE RISE OF ADVERGAMING

Where to post advertisements online in order to separate one company from another is a matter that's considered heavily prior to its implementation. Marketers are forced to balance the potential for product visibility with the cost of hosting the ad in cyberspace. Because over 60% of the youth population uses the internet to play games (Kelly, Bochynska, Kornman, &

Chapman, 2008), it is no surprise that recently there has been a major push towards stealth advertising in the form of advergames. Online games can provide a more highly involving and entertaining brand experience than is possible with traditional media. One of the great potential advantages advergames offer is the games' ability to draw users' attentions to specific brands for more extensive time periods compared to those of traditional advertisements. Based on the games observed, product placement occurred in three main ways: (1) in an ad on the side of the screen, (2) in an ad that pops up in the middle of the screen, and (3) in the actual game content itself. Generally speaking, the ads presented were not too large so as to distract the user from their game, but they do try to be noticeable. Popups or banners generally feature flashy animations or large text along with the company logo to ingrain that familiarity into the minds of the viewers. Sometimes, these ads are placed before the game starts so as to force the user to view a persuasive message in order to get to their desired game. Other times, they occur during the middle of the game, forcing the user to wait and watch if they wish to keep playing. The amount of influence that this brand of marketing has on children is tremendous because it gets kids to not only see a product, but to associate it with something fun that they enjoy doing.

To analyze the prevalence of hidden advertisements within online games, I chose to perform a content analysis of the website candystand.com. In doing so, I aimed to get a glimpse of the unseen industry about which parents know little and of which kids are unwittingly a part. Candystand was launched in 1997 by Wrigley, a subsidiary of Mars Incorporated, as a means of "Connecting our brands with our consumers," according to Wrigley's global chief marketing officer Martin Schlatter (Lakin, 2008). In 2008, the website was sold to Funtank, an entertainment publisher that specializes in brand gaming. My selection of Candystand for the content analysis stems from the popularity of the site, which draws between 4-5 million unique

consumers per month mainly by word of mouth. On average, those who go to the website each spend nearly 13 minutes per visit, playing one of the numerous games available (Lakin, 2008). Using random selection, 60 games out of more than 350 available on the website were chosen and played for a minimum of five minutes each to allow for a thorough examination of ads both outside and inside game content. The ads observed were found either on the sidebar of the game window (n=5), in the center of the game window or within game content (n=46), or at the header or footer (n=8) of the game window. The vast majority of centrally located ads means that the user's attention is drawn toward the product while either waiting for the game to start or while in the midst of playing the game. For kids, this suggests that nearly every user is almost guaranteed in some way to view a persuasive message, leaving it up to their cognitive reasoning to sort out the intent. We can see then that advergaming serves to connect and direct consumers' attentions to the products.

Of the 60 games tested, only one game ("Stack-it!") did not show at least one advertisement either before or during the game. The implication of this is astounding: advertisements are almost unavoidable when playing games online. Considering that a majority of children use the internet specifically to play games, it is perfectly reasonable to assume that kids are exposed to more than the allotted commercial time set by the FCC for television. This alone should be a red flag to legislators who enacted the Children's Television Act in 1990 to protect children from commercial interests. In the television media, if a program fails to adequately separate program and commercial material, the entire duration of the program may be counted commercial material (FCC, 2013). Online, the blending of entertainment and advertisement remains unregulated, which ultimately is detrimental to young children. If legislators at least establish a foundation for levying medium to heavy (perhaps cumulative) fines

against websites that host excessive advertisements, there will be a deterring force to protect children from commercial interests.

The commercial interests of the unhealthy food and drink industry are the largest threat to young consumers. A total of 12 categories were chosen to differentiate products by assigning each a respective number for coding purposes. Not only was every single ad referencing foods and beverages (n=24) unhealthy, but also these ads constituted 40.68% of the total ads viewed. Also worth noting, the second most common product advertised was gum (12%), which I considered for the study to be just outside the scope of the industry. Compared to other products viewed, like automobiles and personal hygiene items, foods and beverages were the only ones ever used within the game content itself. This can be seen for instance in the advergaming “Sour Then Sweet”, where the player performs sour (cruel) or sweet (kind) actions by controlling virtual Sour Patch Kids. Without even having to formally introduce the product, this advergaming lets us know what the product looks like, what it tastes like, and what makes it fun. After every 10 levels (approximately two minutes of gameplay), a short break is used to advertise the product traditionally, like that of a television commercial. For children, the level of product integration located in “Sour Then Sweet” is profound because it’s repetitive and leads to a positive outlook on the candy in general. This appears to fit rather well the expected and documented conclusions regarding the prevalence of unhealthy food and drink advertisements targeted towards youth consumers. Of the 24 ads recorded during the content analysis, six of the products were seen more than one time in different games. The dominance of unhealthy products being advertised online through advergaming is a testament to the foothold that online commercialism has in the consuming minds of America’s youth.

THEY'RE ALWAYS WATCHING

Beyond just gaining product visibility, advertisements can also be used to gather personal information on the viewer. By using trackers in what are known as “cookies” to gain covert access to user’s internet history, preferences, and purchasing habits, supercomputers can break down specific information about individual consumers for marketing purposes. On McDonald’s website Happymeal.com, which is presented as an interactive learning game site for preschoolers, children are asked for an email address so they can play more games or access extra content (Happymeal, 2013). Without parental supervision, children don’t hesitate to enter their parent’s emails (or even yet their own), and a secondary level of marketing opens up. The vast amount of personal data available to advertisers via electronic cookies can potentially be very broad and irksome. A Times Magazine article by Adam Cohen (2000) examined the extent to which the personal shopper program zubbles gathered information on its user Richard Smith, a freelance digital detective. By running a program to monitor the information sent out from his computer, Smith realized that even when he wasn’t online for the purpose of shopping, zubbles was actively monitoring his traffic and relaying information via electronic packets to a hidden address owned by the maker of the program. Among the things zubbles was able to find included Richard’s home address, DVDs he was thinking of buying from Bestbuy.com, and information about a flight he booked for his 14-year-old daughter (Cohen, 2000). For young advergaming users, the wealth of personal information would most likely be sent unnoticed by users posing serious threats to cyber privacy and security. If nothing is done to combat the nature of cookies, children need to be informed about the consequences of visiting websites that host advertisements. Transparency is essential. It is astounding to imagine the wealth of information

the industry has managed to gather of the consumption habits of American youth via spy programs and cookies. Seeing that the largest observed culprits of advergaming are companies promoting high-caloric, nutrient-poor food options, educating children to safeguard personal data and to regularly clear their internet cookies cannot be stressed enough. The fact that websites and advergaming made by junk food companies tend to encourage or require email addresses to play for marketing purposes is a scary and tragic thought, considering the state of our nation's health, especially that of this generation.

FIGHTING BACK? A WORK SLOWLY IN PROGRESS

Studying the stealthy practices of advertisers is an important endeavor today because America is facing an uphill battle health-wise with issues like childhood obesity and type 2 diabetes. Results from the 2007-08 National Health and Nutrition Examination Survey (NHANES) indicated that around 16-17% of children and adolescents ages 2-19 years old had a body mass index greater than or equal to the 95th percentile of the age and sex specific BMI—double that of two decades ago (National Diabetes Education Program, 2011). One of the biggest factors for the onset of obesity and diabetes is a poor diet, the likes of which is propagated forth by online advertisers. Starting before children even possess the mental tools to comprehend and defend themselves, successful marketers and advertisers have created a niche in the mind of a child consumer. Through simple manipulations of content or format based upon hours of careful research, ads are specially crafted to resonate with children of all ages. In the advergaming format, positive associations and ultimately brand loyalty are slowly imparted through the guise of entertainment. Results gathered from examining candystand.com alone demonstrated the prevalence of branded items (particularly foods and drinks) within this niche. By blurring the line between ad and fun, advertising experts have created the perfect medium for prolonged

product exposure. Instead of muting or changing the channels when commercials come on as can be done with the television, kids rather are interested in and attracted to online ads.

Understanding how to curb these pervasive messages is crucial in creating a plan for change. The leading tangible method for doing so is to implement governmental regulations against the number of ads available to children. On television during the week and weekend, the FCC has firmly limited advertisers 10.5 and 12 minutes respectively to market to kids; however, online still no such regulation exists (Kelly et al., 2008). As a matter of fact, currently there is no plan of action being taken by either the FCC or the Federal Trade Commission to regulate the quantity of online ads. That isn't to say, however, that the first steps towards progress haven't been taken. In an attempt to elucidate the information being taken from users and sent to advertisers, the FTC in December of 2010 proposed and passed a bill requiring any website that uses advertising or tracking to display a standard icon in the header (Schwartz, 2011). The issue so far with this bill has been that it calls for self-regulation, which has been minimally accepted at best. So long as advertisers are able to market via advergaming without any real federal backlash, there is no reason for them to stop. Much firmer legislation needs to be passed to remove commercial interests from websites that generate substantial traffic from youth consumers. While the road to creating a healthier and safer consumer culture for children won't be quick or easy, it's imperative that effective action be taken now by either legislators or a federal agency to put an end to deceptive advertising by exploitive companies who want nothing more than to milk an innocent demographic. Advertisers in the food and drink sector have become bullies who don't steal candy from babies, they sell it to them.

REFERENCE LIST

- Calvert, S. (2008). Children as consumers: advertising and marketing. *The Future of Children*, 18(1), 205-234.
- Children's Education Television. (n.d.). *Federal Communications Commission*. Retrieved from <http://www.fcc.gov/guides/childrens-educational-television>
- Cohen, A. (n.d.). Spies among us. *TIME.com*. Retrieved from <http://content.time.com/time/world/article/>
- Flavell, J. H. (1963). *The developmental psychology of Jean Piaget*. Princeton, N.J.: Van Nostrand.
- Institute of Medicine. (2006). *Food marketing to children and youth: Threat or opportunity?* Washington, D.C.: National Academic Press.
- Kelly, B., Bochynska, K., Kornman, K., & Chapman, K. (2008). Internet food marketing on popular children's websites and food product websites in Australia. *Public Health Nutrition*, 11(11), 1180-1187.
- Lakin, M. (2008, September 23). Wrigley sells advergaming website candystand. *Adverting Age*. Retrieved from <http://adage.com/article/madisonvine-news/wrigley-sells-advergaming-site-candystand/131176/>
- Moore, E. S. (2006). *It's child's play: Advergaming and the online marketing of food to children*. Menlo Park, CA: Henry J. Kaiser Family Foundation.
- Number of Out of Home Displays (2013). *Outdoor Advertising Association of America*. Retrieved from <http://www.oaaa.org/Portals/0/Images/No.%20>
- Overview of diabetes in children and adolescents (n.d.). *National Diabetes Education Program*. Retrieved from http://ndep.nih.gov/media/youth_factsheet.pdf

Palmer, E. L., & Young, B. M. (2003). *The faces of televisual media: teaching, violence, selling to children* (2nd ed.). Mahwah, N.J.: L. Erlbaum Associates.

Robertson, T. S., & Rossiter, J. R. (1974). Children and commercial persuasion: an attribution theory analysis. *Journal of Consumer Research*, 1(1), 13.

Schwartz, M. (2011, April 18). Online advertisers pitch self-regulation framework. *InformationWeek*. Retrieved from

<http://www.informationweek.com/security/privacy/online-advertisers-pitch-self-regulation/229401786>

APPENDIX A

Game Name	Product Name or Company Advertised	Location of ad	Size of ad	Type of ad	Text/graphic	Branded Character?	Subject Matter of ad	If other, describe	Color Scale	Top 500 (BrandDirectory)
4 Elements	Froot Loops	2	2	4	3	1	9		4	:
Air Hockey Extreme	McDonalds	2	2	4	3	1	5		4	:
Ballery	Norwegian Cruise Lines	3	4	2	3	0	12	Cruise Line	3	:
Baseball	Froot Loops	2	2	4	3	1	9		4	:
Blastrix	Dr. Pepper	2	2	4	3	0	3		4	:
Call of Atlantis	BMW 335i	1	4	2	3	0	10		4	:
Chichaboom	Kraft Mac n' Cheese	2	2	4	3	1	4		4	:
Darts	Sprint	1	4	2	1	0	12	Cell phone provider	4	:
Dentyne Fire and Ice	Dentyne - Fire and Ice	2	2	3	2	0	11		4	:
Ether War	Kool-Aid	2	2	4	3	1	4		4	:
Factory Balls 3	Captain Crunch	2	2	4	3	1	9		4	:
Fault Line	Dove	2	2	4	3	0	12	Personal Hygiene	4	:
Field Goal Challenge	Sony Playstation 4	2	2	4	3	0	12	Entertainment	4	:
Fishdom	Capital One	2	2	4	3	0	12	Credit Card	4	:
Fore	Norwegian Cruise Lines	3	4	2	3	0	12	Cruise Line	3	:
Frantic Frigates	Hersheys	2	2	4	3	0	2		4	:
Free Kick	Trix	2	2	4	3	1	9		4	:
Galactic Gems	Danimals Yogurt	2	2	4	3	1	4		4	:
Gluey	Subway	2	2	4	3	0	5		4	:
Go Kart Go! Turbo!	Buick Lacrosse	2	2	4	3	0	10		4	:
Gold Glove	ABC Family	2	2	4	3	0	12	Television Programming	4	:
Governor of Poker 2	Sprite	2	2	4	3	0	3		4	:
Grid	L'Oréal	2	2	4	3	0	12	Personal Hygiene	4	:
Cold and Flu Invasion	Dove	2	2	4	3	0	12	Personal Hygiene	4	:
H.O.R.S.E.	Kool-Aid	2	2	4	3	1	4		4	:
Hydro Racer	Sears	2	2	4	3	0	12	Appliances	4	:
Jigsawce	Frosted Flakes	2	2	4	3	1	9		4	:
Legend of the Golden Mask	Capital One	2	2	4	3	0	12	Credit Card	4	:
Let It Glow 2	Pop-Tarts	2	2	4	3	0	4		4	:
Match Maker Classic	Lowe's	2	2	4	3	0	12	Home Improvement Supplies	4	:
Meet my Valentine	Xbox One	2	2	4	3	0	12	Entertainment	4	:
Monster Trucks	Trident	2	2	3	2	0	11		4	:
Motocross	McDonalds	2	2	4	3	1	5		4	:
Movie Star	Coca-Cola	2	2	4	3	0	3		4	1
Oasis Difference	Delta Airlines	4	4	2	3	0	12	Airline	4	1
Off Balance	Pillsbury Cinnamon Rolls	2	2	4	3	1	4		4	0
Parking Lot Derby	Sprint	1	4	2	1	0	12	Cell phone provider	4	1
Pop!	Sears	2	2	4	3	0	12	Appliances	4	1
Pow Pool	BMW 335i	1	4	2	3	0	10		4	1
Pro Skeet Shooting	Colgate	4	4	2	3	0	12	Personal Hygiene	4	1
Ram the Ram	Stride	2	2	3	2	0	11	Credit Card	4	0
Skate Rage	Coca-Cola	2	2	4	3	0	3		4	1
Slipstream	Honey Nut Cheerios	2	2	4	3	1	9		4	0
Sour Patch Stunt Crew	Sour Patch Kids	2	2	3	2	0	2		4	0
Sour Then Sweet	Sour Patch Kids	2	2	3	2	0	2		4	0
Spherez	BMW 335i	1	4	2	3	0	10		4	1
Stack-it!	N/A									
Star Quiz	Sony Playstation 4	2	2	4	3	0	12	Entertainment	4	1
Streetball Jam	Colgate	4	4	2	3	0	12	Personal Hygiene	4	1
Stride Shift Racing	Stride	2	2	3	2	0	11		4	0
Super Babysitter	Pop-Tarts	2	2	4	3	0	4		4	0
Target Marketer	Stride	2	2	3	2	0	11		4	0
The Great Siege	Norwegian Cruise Lines	3	4	2	3	0	12	Cruise Line	3	0
Trident Layers Factory	L'Oréal	2	2	4	3	0	12	Personal Hygiene	4	1
Use Boxmen	Audi A4	4	4	2	3	0	10		4	1
Vector TD 2	Dentyne	2	2	4	3	0	11		4	0
What's For Dinner 2	Sears	2	2	4	3	0	12	Appliances	4	1
Word Collector	Xbox One	2	2	4	3	0	12	Entertainment	4	1
Wrath of Anubis	McDonalds	2	2	4	3	1	5		4	1
Youda Fairy	Dell	4	4	2	3	0	12	Computers	4	1