

# The Interactive Indulgence: The Use of Advergaming to Curb Childhood Obesity

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## Abstract

*As childhood obesity rates in the United States continue to rise, health professionals and pro-health advocates are looking to utilize interactive media tactics for childhood obesity prevention. This study analyzed the viewpoints of interactive media agency professionals regarding the strategy, measurement, and future potential of advergaming. Research was conducted through intensive interviews with agency professionals. This study found that advergaming can influence an audience's behavior through their various interactive elements and entertaining platforms. Application of Fisher's Narrative paradigm provides additional insight into the persuasive nature of advergaming. Successful advertising campaigns utilize integrated forms of media, with interactive media technologies serving to complement traditional media. Despite the ever-changing media landscape, advergaming may prove to be a sustainable strategy for childhood obesity prevention.*

## I. Introduction

Interactive media technologies have exploded in recent years. Advergaming, a new advertising trend utilizes "branded products or images within an interactive video game" and offers a unique hybrid of brand messaging (Cicchirillo, 2011, p.1). In efforts to utilize new media outlets and to optimize their online brand presence, many major food corporations have started implementing the use of advergaming to market to children. Such gaming technology is very popular with kids, as more and more children spend increasing amounts of time on these advergaming websites (Moore & Rideout, 2010). However, ethical questions regarding the types of behavior learned from these games have caused concern among many health advocates and health professionals. Controversies have emerged that discuss child-targeted food advertising potentially linking to childhood obesity.

To compete against the overwhelming amounts of unhealthy food-based advergaming, many pro-health initiatives have begun implementing advergaming and other forms of interactive media into their campaigns (Lu et al., 2010). While such interactive media technologies have the potential to influence children's food preferences and snack consumption, more research is needed to fully understand how advergaming can be used as an educational tool to teach children about nutrition and healthy eating habits (Harris, Speers, Schwartz, & Brownell, 2011). There are various ways in which advergaming can influence children's behavior; however, Fisher's Narrative Paradigm offers a new and critical look into the persuasive power of stories embedded in an advergaming.

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This study sought to examine the fundamentals of an advergame: how its persuasive power can influence children and how the success of an advergame is measured from the perspectives of interactive media professionals. Using the knowledge gained from these professionals, this study analyzed how pro-health initiatives can use such interactive media as an educational tool in promoting healthy habits and whether or not advergames are a sustainable advertising strategy in the long-term fight against childhood obesity.

## **II. Literature Review**

In the following literature review, the author examined various articles on childhood obesity in the U.S., the impact of food marketing on childhood obesity, the delivery of advertising messages to children through interactive media, the use of advergames to prevent childhood obesity, and theoretical implications associated with processing advergames.

### ***Childhood Obesity in the United States***

Obesity is on the rise. Recognized as a nationwide epidemic, obesity in the United States has steadily climbed every year. According to the Centers for Disease Control and Prevention, obesity prevalence has dramatically increased within recent decades, doubling among adults and tripling among children and adolescents (“Overweight and Obesity,” 2012). Rates remain high: approximately 35.7% of adults with a body mass index (BMI) of 30 or higher and 17% (or 12.5 million) of children and adolescents with a BMI at or above the 95th percentile are obese (Ogden, Carroll, Kit, & Flegal, 2010; Ogden, Lamb, Carroll, & Flegal, 2012). These trends have been well documented, and statistics reveal a disturbing reality: People are getting heavier and it’s happening at a younger age. Today, one in three children are overweight or obese (Ogden et al., 2012).

Obesity in early life can lead to serious health consequences, putting children at risk for various diseases in adulthood such as diabetes, heart disease, and severe adult obesity (U.S. Department of Health and Human Services, 2010). In addition to long-term health effects of excess weight, studies have also found numerous short-term effects during childhood like development of atherosclerosis, impaired glucose tolerance, and musculoskeletal discomfort (“Overweight and Obesity,” 2012). Research reports that 70% of obese children had at least one cardiovascular disease (CVD) risk factor, and 39% had two or more risk factors (Freedman, Mei, Srinivasan, Berenson, & Dietz, 2007). As the childhood obesity epidemic continues to sweep the nation, many researchers are investigating the causes and contributors to the problem.

### ***Childhood Obesity and Food Marketers***

According to the Centers for Disease Control and Prevention, there is no simple answer to the question, “What contributes to [being] overweight and obesity?” (“Overweight and Obesity,” 2012). This is a complex health issue; various factors such as behavior, environment, and genetics all play a role in causing people to be overweight or obese (“Overweight and Obesity,” 2012). One particular contributor has received considerable criticism and research attention: Television food advertising has sparked controversial debates about food advertising targeting children and the potential link of such marketing to childhood obesity. A comprehensive study conducted by the CDC Institute of Medicine (IOM) investigated the impact of food marketing on childhood obesity and found that television food marketing does play a role in the obesity epidemic by influencing key dietary precursors, including food-related beliefs, health preferences, and purchase requests of children and youth (Koplan, Liverman, & Kraak, 2005). Research completed by the American Academy of Pediatrics confirms the IOM’s findings. After viewing toy or food commercials, the children in the study were asked to complete three food preference measures. Results revealed that all children who viewed the food commercials selected fat-rich and carbohydrate-rich items from food preference checklists (Boyland, Harrold, Kirkham, Corker, Cuddy & Evans, 2011).

In response to the correlational evidence between children’s exposure to food marketing and the increasing rates of obesity, several companies in the United States have pledged to transform their child-targeted advertising. In November of 2006, the Council of Better Business and 10 leading food and beverage companies launched the Children’s Food and Beverage Advertising Initiative (CFBAI), which aims to “shift the mix of advertising primarily directed to children to encourage healthier dietary choices and healthy lifestyles” (“Children’s Food and Beverage Advertising Initiative,” 2012). The CFBAI will go into effect on December 31,

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2012 with company-specific nutrition standards that govern what food participants advertise to children. Since the initiative's founding, the number of participants has increased to 16, and 3 participants have elected not to engage in child-directed advertising ("Children's Food and Beverage Advertising Initiative," 2012). Positive trends have emerged with the initiative and participants have enhanced the nutritional profile of foods advertised to children. The CFBAI's 2010 progress report revealed improvements among the participants' child-targeted ads, as more than three-quarters of the advertisements included foods with essential nutrients like fiber, calcium, and potassium (Kolish, Hernandez, & Blanchard, 2011). Many initiatives like the CFBAI have positively impacted food marketing on television and recent research reveals a decline in television food advertisements targeted to children (Powell, Szczypka, & Chaloupka, 2010); however, many companies have turned to another form of advertising to market their products to younger audiences.

### ***The Rise of Branded Entertainment***

Technological advancements and digital innovations have created a media landscape that is constantly changing. The exclusive use of traditional media outlets no longer satisfies target audiences. According to a Kaiser Family Foundation Study, there has been an increase in online media use among young people, with the average youth spending an hour and a half per day on the computer (Rideout, Foehr, & Roberts, 2010). In an effort to make the transition from traditional advertising outlets to interactive media, many major food corporations have increasingly turned to the Internet to market food products to children (Thomson, 2010). Branded entertainment, which is a popular advertising strategy that imbeds branded messages in entertainment-oriented media content, allows marketers to utilize new media technologies and techniques (Wise, Bolls, Kim, Venkataraman, & Meyer, 2010). Many companies are jumping on the branded entertainment bandwagon, expanding their child-targeted marketing to commercial, social media, video, and third party websites (Harris, Speers, Schwartz, & Brownell, 2011). According to a report by PQ Media Research, spending efforts in the branded entertainment sector is expected to exceed \$40 billion by the end of 2012, despite slower economic growth (Ames & Marx, 2008).

### ***Advergaming***

One particular segment of branded entertainment has become part of the fastest growing interactive media effort for advertising campaigns (Wise et al., 2010). Advergaming, which is "the delivery of advertising messages through electronic games," has become an accepted tactic among food marketers to reach a target audience (Hernandez & Chapa, 2010, p.59). These kid-friendly games are typically simple in design with short playing times, allowing for seamless distribution across various media platforms, such as websites, mobile phones, interactive digital television, and email (Cauberghe & Pelsmacker, 2010). Examples of advergaming include "puzzles and classic games, arcade-style games, and other highly engaging features such as building avatars or using candy to 'paint' pictures" (Harris et al., 2011, p.4).

Brand placement is not a new phenomenon. Advertisers have utilized this strategy for decades. Product placement agreements for movies, television programs, and video games allow advertisers to promote a brand within the content created by third-party media companies; however, advergaming offers a unique form of product placement that is different from traditional practice (Wise et al., 2010). Advergaming is specifically designed for the purpose of promoting the sponsored brand, therefore, offering a hybrid form of brand messaging: "Advergaming merges the level of advertiser control found in traditional advertising with the entertainment communication context associated with product placement" (Wise et al., 2010, p. 27-28).

### ***The Persuasive Advergaming Environment***

Due to their fun and interactive nature, many child-targeted food companies are featuring advergaming on websites to increase exposure and positive associations with their brand (Harris et al., 2011). Several studies have revealed that children are willing consumers of these interactive marketing efforts, as gaming is one of the most popular online activities of children and youth (Rideout et al., 2010). In spot advertising through traditional channels like television or print media, children are passive in their exposure to brand placement. With branded entertainment, however, children receive a fundamentally different experience. Advergaming, which is designed to be amusing and engaging, demands focused attention from the player, and children are active seekers in their interactions with the content (Wise et al., 2010). They are engaging with the brand. A content analysis of four popular children's websites revealed that advergaming utilized branded characters and other attention-getting features like animation, colorful text, and dynamic images to appeal

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to children (Alvy & Calvert, 2008). Various studies have found that production features like these encourage children to return to the website and to play the advergame multiple times, therefore maximizing the players' interactions with the promoted brand (Harris et al., 2011).

Research demonstrates that children are taking the bait. A study examined children's exposure to U.S. food company websites featuring advergames and found that 1.2 million children visit these sites every month, spending as much as one hour per month on some sites. The study also found that children were 77% more likely to visit websites featuring advergames and spent 88% more time on these sites than other pages (Harris et al., 2011). Many food companies recognize the tremendous marketing opportunity of advergames to children and have readily adopted this interactive media strategy, as approximately 80% of U.S. food websites promoted on children's television networks include advergames (Culp, Bell, & Cassady, 2010). A content analysis of major food advertisers' websites found that 90% of the promoted brands were of poor nutritional quality, containing high levels of fat, sodium, and sugars that are unhealthy for children (Moore & Rideout, 2007). Other studies have confirmed that the most commonly promoted products within advergames are candy, cereals, and fast food (Koplan, Liverman, & Kraak, 2005).

The power of play has proven to be highly effective in persuading children to visit certain websites, but researchers recently began investigating the impact of such food-related advergames on children. Some researchers argue that advergames may be more effective than television advertising because of their unique combination of commercial and noncommercial content packaged in an entertaining format. This blend makes it difficult for children to identify the advergame's origin and web promotion (Mallinckrodt & Mizerski, 2007; Moore & Rideout, 2007). Other research suggests that children are more easily influenced by interactive gaming content and advertising messages because of their lack of developed cognitive and reasoning abilities (Cicchirillo & Lin, 2011). Failure to understand the persuasive intent of advergames can cause unhealthy eating behaviors in children. Harris et al. (2011) examined the effects of playing advergames on children's food consumption and found that, like television advertising, advergames have the potential to negatively affect snack food consumption. Children who played advergames promoting unhealthy foods consumed 56% more unhealthy snack foods and consumed one-third fewer fruits and vegetables than children who played the control and healthy games. The study argues that such advergames may contribute to an increase in unhealthy food consumption and high caloric intake in children, which is a behavior that can lead to obesity (Harris et al., 2011).

Additional studies have yielded similar results. Participants in research completed in 2010 were offered a snack after playing food advergames. Of the total participants, 65% selected the brand promoted in the advergame, demonstrating that advergames have the potential to influence players' food preference (Hernandez & Chapa, 2010). Mallinckrodt & Mizerski (2007) examined branding effects of food advergames on children aged 7-8, who played a Froot Loops cereal advergame. Results revealed that children who played the advergame reported higher preferences for Froot Loops over other cereals as compared to the children who played a different game. Interestingly, the study also found that the children who played the Froot Loops advergame did not demonstrate a higher intent to request the brand from their parents (Mallinckrodt & Mizerski, 2007).

### ***A Source of Concern for Health Professionals***

In response to the evidence that food-branded advergames "may contribute to increased consumption of nutritionally poor foods in children, which over time can lead to obesity," many health advocates and public health researchers have expressed concern and discussed restrictions on companies' use of advergames to market unhealthy foods to children (Harris et al., 2011, p.3). Harris et al. (2011) examined the exposure and impact of advergames on children and recognized the efforts of the CFBAI and the improvements made by the participating companies; however, the study cited two noteworthy limitations in the companies' self-regulatory pledges. First, the CFBAI only sets nutrition criteria for foods advertised to children younger than the age of 12, which is typically defined as advertising that appears in the media with a child audience composition of 35% or higher (Harris et al., 2011; Peeler, Kolish, Enright, & Burke, 2010). This definition is inapplicable to Internet marketing, as audience compositions are lower for even obvious child-targeted websites. Therefore, participating companies are able to market to children, while still meeting the terms of their CFBAI company pledges (Harris et al., 2011). The second limitation regards the CFBAI's permission for participating companies to market "better-for-you foods" as long as their nutritional criteria matches the government guidelines and recommendations (Harris et al., 2011; Peeler et al., 2010). Research revealed

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that promoting somewhat less unhealthy foods through advergames still increases unhealthy snacking and induces negative eating habits among children (Harris et al., 2011).

Other researchers suggest that marketing organizations recognize food-related advergaming as a controversial topic and to “tread these waters with caution and engage advergames with the mindset of ethical consideration for the viewer” (Cicchirillo & Lin, 2011, p. 495). Additional managerial implications for ethical practices include advertising literacy education programs to help children understand the persuasive nature of ads and the addition of direct links to nutritional sites within the company’s advergames (Cicchirillo & Lin, 2011).

### ***Advergaming and Childhood Obesity Prevention***

Despite the abundance of research that highlights their negative effects on children’s unhealthy food consumption, advergames are not all bad. There has been some discussion among scholars and health practitioners regarding the use of interactive media for childhood obesity prevention. Research on the effects of healthy advergames reveals an encouraging possibility for health advocates. In one study, children who played video games with goal-setting, interactive content consumed more fruits and vegetables than children who played nutritional, knowledge-based games on popular websites (Baranowski, Baranowski, Thompson, Buday & Jago, 2011). In another study, children who played advergames that promoted fruit and vegetable consumption ate 50% more healthy food compared to the children who played unhealthy advergames, suggesting that healthy advergames have the potential to improve children’s eating behaviors (Harris et al., 2011).

In an effort to reduce childhood obesity, the Children’s Nutrition Research Center of Baylor College of Medicine collaborated with design firm Archimage to develop a series of behavioral intervention projects, specifically designed to merge behavioral theories with interactive media content (Lu et al., 2010). Numerous health-based, interactive videogames have been developed and yielded successful results, offering guaranteed effectiveness (Lu et al., 2010). While promising strides have been made in this area of research, there are many opportunities for further explorations into interactive media as a tool in the fight against childhood obesity (Lu et al., 2010).

### ***Theoretical Implications for Children’s Processing of Advergames***

In examining the persuasive power of advergames, many researchers offer various models and theories to provide insight into how children process such interactive, branded entertainment. The cognitive capacities of children are limited to early developmental stages; therefore, their ability to process large amounts of simultaneous information is hindered (Cicchirillo & Lin, 2011). Employing the elaboration likelihood model, some researchers argue that children process advergames peripherally, based on simple associations and cues (Moore & Rideout, 2007). Thus, children may center their attention on simple aspects of the advergame like branded characters, colorful animation, and stimulating music, which, in turn, impacts their perceptions and attitude towards the brand (Moore & Rideout, 2007). Other researchers suggest behavioral and learning theories, such as the Social Cognitive Theory, to provide insight into how advergames influence children’s attitudes and responses (Cicchirillo & Lin, 2011).

Little research has examined the narrative discourse of advergames and its persuasive effects on children’s food preferences and attitudes towards the brand. Thomson (2010) analyzed the marketing stories associated with advergames on two child-targeted websites; however, the research lacked focus on the narrative elements within the advergames.

### ***The Narrative Paradigm***

Application of Fisher’s Narrative Paradigm offers a different look at the persuasive power of advergames. The Narrative Paradigm emphasizes the effectiveness of influence through narration (Fisher, 1984; Fisher, 1987). Proposing that human beings are fundamentally storytelling creatures, Fisher argues that the most persuasive and influential message is not based on rational decision-making and sound arguments. Instead, persuasion is accomplished through an emotional process based on narrative storytelling. If a narrative is engaging, truthful, and congruent with an audience’s experiences, then it can convince them of good reasons to engage in a particular action or belief (Fisher, 1984). The Narrative Paradigm includes five assumptions: 1) Human beings are storytellers; 2) narrative rationality relies on good reasons as the basis for most

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decision-making; 3) reasoning is determined by an individual's unique perspective; 4) rationality is based on an individual's awareness and consistency of a narrative as compared to other experiences; and 5) individuals create and recreate reality through a selection of narratives (Fisher, 1984; Fisher, 1987). Importantly, Fisher emphasizes that the most influential narratives must be both convincing and appealing to the emotions and experiences of an audience to achieve persuasion (Fisher, 1984). The Narrative Paradigm serves as a theoretical base for this research, as narrative persuasion offers new analysis of the influential power of advergames on children.

Although a considerable amount of research exists regarding the nature of food-related advergaming, there is a lack of research in building a theoretical foundation for understanding the current role and future potential of advergaming as a strategy in the long-term fight against childhood obesity. This research is intended to fill the gap in previous research and to create a platform of discussion among advertisers and pro-health advocates on the topic of advergaming and its impact on children's behaviors and food preferences. Specifically, this study sought to answer the following questions:

RQ1: In what ways can childhood obesity campaigns and other pro-health initiatives use interactive media as an effective strategy in changing food habits and behaviors in children?

RQ2: What makes branded entertainment like advergames successful for an advertising campaign?

RQ3: Are interactive media tools like advergames a sustainable strategy for advertising campaigns?

This study is unique in that it seeks to understand the strategy behind advergames from the point-of-view of interactive media agency professionals. Their expertise and experience with branded entertainment provide a credible and interesting perspective on the current role and future potential of advergames. This research is important because it provides a breakdown of the use of advergames from an agency standpoint, which could foster discussion and education for pro-health advocates looking to implement interactive media in childhood obesity prevention campaigns.

### III. Method

This study uses intensive interviews and secondary research to tackle research questions from various perspectives. Intensive interviews were conducted with three communications professionals who specialize in the interactive media and/or branded entertainment industry. The participants were selected based on their familiarity with the use of advergames. To provide a greater perspective on the topic of advergaming, the researcher interviewed professionals from agencies of different sizes and locations. One interviewee is employed by a full service e-consultancy, while the other two interviewees are employed by the same independent advertising agency. The sizes of the agencies range from 51 employees to 500 employees. Both agencies are privately held, and located within the United States. One interview was conducted via telephone, and the other two were conducted via email correspondence. All participants held top-level positions, with titles including Director of Creative, Interactive Production Coordinator, and Interactive Production Director. While the sample size is small, the qualitative techniques of in-depth interviews offer rich insight and textual data that is crucial to this area of study (Zhou & Sloan, 2009, p. 289). Each interview followed the same structure, based on 10 questions (see Appendix). Depending on the varying responses, other questions were sometimes asked to provide further depth or clarification on a particular topic. Interviewees were asked to articulate their experiences, knowledge, and opinions about the use of advergames in general.

### IV. Findings and Analysis

#### ***The Persuasive Power of Advergames and their use in pro-health campaigns***

Secondary research confirms that advergames promoting fruit and vegetable consumption have the potential to influence children's food preferences and snack consumption in a positive way, suggesting that advergames may serve as an effective educational tool to teach children about nutrition and physical activity (Harris et al., 2011). However, the vast amount of persuasive elements involved in advergaming makes it difficult to understand how exactly such interactive technology can persuade its audience to change eating

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habits and behaviors. The majority of research regarding the influential nature of advergames speaks to the entire package of an advergame (Alvy & Calvert, 2008). Vibrant and stimulating colors, influential branded characters, thrilling sound effects, dynamic animation, and embedded brand messaging are all wrapped up in an interactive gaming environment to effectively engage an audience.

From an agency standpoint, the primary function of advergames is to promote brand awareness and repeated play; therefore, the game is specifically designed with the total package in mind. The mixture of the game's engaging elements promotes repetitive play, persuading an audience to return to a site and interact with the branded message again and again. Interactive elements such as badges, high scores, multi-player scenarios, and online credits all play into the addictive and persuasive nature of advergames. One interviewee, the Director of Creative at a full service e-consultancy, said, "If an advergame pairs these elements with a known commodity like Mario & Luigi, Sonic the Hedgehog, Legos, Transformers, or Batman, then it is a home run strategy" (personal communication, April 24, 2012). Advergames also offer compelling game mechanics like competition, as seen in leader boards for multi-player scenarios or when beating one's own score, to appeal to an audience (personal communication, April 24, 2012). The Interactive Production Coordinator from an independent advertising agency further explained how the fun, unique content of advergames is attractive to an audience, especially children.

"It's the repetitive and addictive nature of a game that hooks kids. Just like we can recall a jingle in a heartbeat or sing a song from Sesame Street that we haven't heard for 20 years, if you do something often enough it becomes engrained. Games last longer than a 30 second jingle and are more engaging, so they're probably even more powerful in becoming a part of the user's mind." (personal communication, April 23, 2012)

In addition to the repetitive and addictive nature of adver gaming, perhaps another way in which advergames influence its players is through the use of narrative persuasion. Although advergames are usually short in length and simple in design, the game offers a mini version of a narrative story through its animation and branded characters. Fisher's Narrative Paradigm points to the potentially powerful effects of storytelling, suggesting that narratives can convince an audience of good reasons to engage in a particular behavior (Fisher, 1984). Many narratives in association with adver gaming position the promoted brand in a way that is essential and desirable to the player (Thomson, 2010). Because children are more likely to focus on the advergame itself rather than the advertising component, they are less skeptical and more receptive to the branded messaging (Moore & Rideout, 2007). Therefore, if a certain product holds high value in the virtual world of an advergame, then a child has good reasons to believe it has the same power in the real world (Fisher, 1984).

Based on the notion that persuasion is accomplished through an emotional response rather than a rational process, the Narrative Paradigm also offers a descriptive lens in explaining advergames' ability to influence brand preferences and attitudes among children. Positive experiences with an advergame can translate to positive feelings towards the brand (Hernandez & Chapa, 2010), as children utilize their emotions to shape their beliefs and actions (Fisher, 1984). Analyzing the various persuasive aspects of advergames can provide researchers and pro-health advocates with information and insight into ways to influence children's behavior within a fun and interactive context.

### ***Measuring success***

Depending on a client's specific goals for an advertising campaign (whether it is to promote a specific product or to educate and influence a behavior), there are numerous aspects in measuring adver gaming success. From an agency standpoint, the advergame must be fun, engaging, and addictive in nature, which translates to extended playing time and repetitive play. This interaction time is also an indicator of a website's success, as the longer an individual remains on a site, the more he or she is exposed to a particular brand through various product placements (Alvy & Calvert, 2008). Email signups and social media interactions, including Likes, Follows, and Re-pins, are other indicators of positive results. A successful advergame is also viral, as the brand is shared and promoted among users, allowing for maximum exposure and extended interaction rates with the brand across all channels. In addition, the advergame should be interesting and memorable, encouraging an audience to play again and again, instead of something they will forget as soon as they close the window (personal communication, April 23, 2012).

In examining the use of advergames that encourage healthy lifestyle choices, some research suggests providing performance feedback as a way to improve children's self-efficacy (Cicchirillo & Lin, 2011).

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Perhaps a major success of such advergames could be measured by each player's health improvements and long-term record with making healthy choices. The online environment of advergames is helpful in collecting consumer data and in analyzing campaign results. In order to effectively measure the quantitative success of an advergame, companies should track the game's various interactions: every click should be measured, every page view should be counted, and time interacting with the property should be accurately reported. Furthermore, the reported statistics should be provided to the client and compared with the client's specified definition of success for the campaign (personal communication, April 24, 2012).

According to agency professionals, the game should also correspond with what the promoted brand stands for and what the targeted audience expects. Although advergaming is a powerful tool in promoting brand messaging and building brand awareness, it is not necessarily applicable for every client. The use of advergaming is most effective for clients who target a demographic with high social involvement (personal communication, April 23, 2012). Children and youth are active agents of social involvement, as they spend more and more time online each year. Additionally, home Internet access has expanded from 74% to 84% in the last five years (Rideout et al., 2010). With the increase in online media use among children and youth, advergaming is an effective outlet in which pro-health advocates and other health professionals can promote their messages.

### ***The Future of Advergames***

Like all aspects of digital media, interactive media tools are likely to evolve. The technologies employed to implement these types of interactions will continue to change at a blistering rate. One interviewee, the Director of Creative at a full service e-consultancy, said, "With Flash essentially gone, the gaming platforms will move to native applications and Facebook practically exclusively. Desktop variations of advergaming may become viable, but the expense associated with these games may not be sustainable" (personal communication, April 24, 2012). Another interviewee, the Interactive Production Coordinator at an independent advertising agency, discussed another aspect of advergames that is likely to evolve: "The future for advergaming will be further development in seamlessly syncing real money with game money. The easier it is to spend within the game to get a real product, the better" (personal communication, April 23, 2012). Because the market is so saturated with constantly evolving technologies, the use of advergames for a campaign must not only be relevant to a brand's target audience, but it should also appeal to a wider audience (personal communication, April 23, 2012).

The changing media landscape might pose a challenge for interactive media tools; however, the persuasive power of advergames on players' brand perceptions and preferences is hard to dismiss. Therefore, the strategy behind advergames may prove to be sustainable in the long-term fight against childhood obesity. The influential nature and interactive components of interactive media tools, such as advergames, offer promising effectiveness (Lu, 2010). Additionally, children's Internet use is at an all-time high, as research suggests a continued increase in trends (Rideout et al., 2010). Research on the link between behavioral and cognitive theories and new media offers additional promise in sustainable efforts of interactive media for childhood obesity prevention (Lu et al., 2010).

Unless the brand is specifically in the gaming space, agency professionals suggested that the use of advergaming technology for an advertising campaign should complement traditional advertising, rounding out other multi-channel efforts that a client is leveraging (personal communication, April 23, 2012). Successful campaigns use both traditional and innovative advertising techniques to promote a brand. The use of advergames can drive users to traditional messages in order to engage them with the business, as interactive media tools like advergames generally play more of an experimental role for most clients, supplementing traditional ads, such as banners, print, and television (personal communication, April 24, 2012).

## **V. Conclusion**

This study found that advergames can influence children's food habits and behaviors in various ways, including the use of branded characters, visual features, and repetition; however, it is the combination of all gaming components that makes advergaming so influential. Advertising professionals spoke to the addictive

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nature of the games, emphasizing that increased playing time translates to maximized exposure to the brand and its messages. Additional insight into the narrative persuasion of advergames was provided through the application of Fisher's Narrative Paradigm. Children, whose cognitive abilities are age limited, are impacted by the stories created through advergames, as they use good reasons and emotion-based logic to make decisions on brand preference and behavior (Fisher, 1984).

In addition, this study revealed the various aspects in measuring an advergame's success in an advertising campaign. Different clients demand different results; however, the primary indicators of success for advergames are increased interaction time and repetitive play. The longer an individual plays the game, the longer he or she is engaged with the brand and with the branded message. Many pro-health advergames offer performance feedback to their players, and such results can be measured as well. It is important to note that advergaming is not an effective strategy for every type of client; therefore, demographics and consumer data should be appropriately analyzed before incorporating the use of advergames into a campaign. As children and youth use online media more and more every year, pro-health advocates and other childhood obesity initiatives would be wise to utilize this strategy.

The study also found that interactive media tools are likely to evolve with the ever-changing media landscape. However, the strategy behind advergames is concrete in nature: "Provide an edutainment (combining education with entertainment) modality by creating theoretically precise, personalized, meaningful, and immersive environments that embed functional knowledge and change procedures" (Lu et al., 2010, p.1). Therefore, advergaming may prove to be a sustainable strategy in the long-term fight against childhood obesity. Importantly, if advergames are implemented into an advertising campaign, then they should work as a complement to traditional media. Successful campaigns take a multi-faceted approach and utilize integrated forms of media to reach their audiences.

This study relied on phone and email interviews from a small sample of agency professionals to gather information and insight. Face-to-face interviews may foster better explanations, more in-depth answers, and greater accuracy than phone and email interviews for future researchers looking to collect primary information. While the present findings are limited in their small sample size and data collection method, this study adds foundation to the belief that interactive media may prove to be an effective prevention tool in the long-term fight against childhood. Future research into the use of advergaming and childhood obesity prevention should focus on communication theories dealing with the persuasive nature of advergames to gain a greater insight into how such interactive media can influence children. Additional research on advergames that promote healthy food and their influence on children would provide more credibility and knowledge of interactive media as an educational tool for obesity prevention.

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## **Appendix**

### ***Interview Questions***

1. What is your official title at your place of work?
  2. What is the typical role of branded entertainment like advergames for clients?
  3. How do companies use interactive media like advergames to promote brand image?
  4. Why should companies consider online entertainment and interactive games (whether through Facebook, mobile apps, promotional software, etc.) as a part of their advertising budget? What are the benefits?
  5. For what type of client is advergaming most effective?
  6. Is the use of advergames an effective alternate or complement to traditional advertising? Please explain.
  7. What makes branded entertainment like advergames successful for an advertising campaign?
  8. How do you track advergaming interactions? Are there specific analytic channels a company can use?
  9. What sort of results do clients typically want from advergaming interactions?
  10. Working in a constantly changing media landscape with emerging trends in social media and technological advancements, do you think interactive media tools like advergames are a sustainable strategy for marketing professionals? From your point of view, what is the future for advergaming?
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