

A LOOK AT CHILD ADVERTISING AND INFLUENCE: ARE ADVERTISERS
REINFORCING GENDER STEREOTYPES WITH ADVERGAMES?

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Abstract

This study examined gender stereotypes in advertising entertainment games featured on two top toy manufacturers websites. The research investigated if gender stereotypes were featured in advergames, and if so, which were found more often in female-oriented and male-oriented advergames. Results from a content analysis of 199 advertising entertainment games showed that the majority of advergames featured at least one or more gender stereotypes. The gender stereotypes that appeared most often for female-only games were a thin body portrayal and females shown as passive. For males, the gender stereotypes that appeared most often included a portrayal of danger and adventure in the majority of the games, and acts of violence and aggression. Additionally, females were targeted with more advergames than males and gender-neutral advergames were of a small percentage. This study was the first of its kind to explore gender stereotypes in advergames for the purpose of adding to the literature on advertising effects.

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Chapter I: Introduction

The marketplace features a diverse mix of companies promoting a multitude of products and services. In order to “stand out” amongst competitors, corporations are always searching for new ways to advertise to customers to increase market share. Traditional methods of advertising are being used, and new methods are being investigated to fill this need (Chester & Montgomery, 2008; Montgomery, 2000). The emergence of new media, such as the Internet, brings new opportunities for advertising, which also includes new ways to market directly to children. Internet websites are attracting children by offering advertainment, an advertisement through entertainment, in the form of what is known as an advergence. An advergence is brand and/or product information coupled with entertainment through an interactive game (Waiguny, Terlutter, & Zaglia, 2011).

Studies have been conducted on how media affects children’s perceptions and learning. Media can influence children on what is or is not acceptable in society (Hust & Brown, 2008; Martin & Ruble, 2004). Messages are transferred through advertisements reinforcing positive or negative viewpoints, which make media messages a powerful authority (Gunter, Oates, & Blades, 2005). One area of research is the use of gender stereotypes in advertisements. Prior studies reveal the use of gender stereotypes in traditional advertisements directed at children, and their influence on viewer’s perception of the world around them (Ruble, Balaban, & Cooper, 1981; Pike & Jennings, 2005; Larson, 2001; Browne, 1998; Smith, 1999). Research shows that children can derive self-esteem, values, and brand preferences from advertisements (Browne, 1998). As advertising to children increases in online media platforms, gender stereotypes may be

promoted to children, while they are impressionable (Nairn, 2008; Bakir & Palan, 2010). Advertisers are specifically targeting children with advergames, and it raises the question if this new form of marketing also reinforces gender stereotypes. The aim of the research is to determine if advertisers embed gender stereotypes in advergames, and if so, what gender stereotypes are directed to children. Although advertisers claim that gender stereotypes are diminishing, closer examination of this new media may show that gender stereotypes are still prevalent.

Chapter II:

Literature Review

The 2000 U.S. Census counted more than 60,253,375 children between the ages of one to fourteen. Recently, the 2010 Census indicated the total number of children grew by a little less than a million totaling 61,227,213 (Howden & Meyer, 2011). Though the median age of the average American increased in this ten-year time period, from 35 to 37, a 2.6% demographic increase is seen in the 18 and younger age group (Howden & Meyer, 2011). Companies are capitalizing on this large demographic. Children everywhere are taking part in the consumer market and the makers of goods and services are showing a vested interest in the growing group known as young purchasers (McNeal, 1992; McNeal, 1999).

2.1 Children and Advertising

Children embrace new technologies and are known to be heavy media users (Calvert, 2008). Television has become a staple in most American homes and previous research has focused on studying television commercials to gain insight to how

advertisements affect children. Television advertising is still a prominent form of media in the life of children (Holt, Ippolito, Desrochers, & Kelley, 2007). According to a Nielsen study (2009), kids from the age of two- to five-years-old spend more than 32 hours in front of a television a week. Older children, from six to eleven years of age having other responsibilities such as school, spend less time a week (28 hours) in front of the TV (McDonough, 2009). A similar study done the same year by the Kaiser Family Foundation attributed children (eight- to 18 year-olds) to watching approximately 30 hours a week of TV (Rideout, Foehr, & Roberts 2010). This study also points out that youth are now participating in TV viewing on multiple platforms including TiVo/DVR, On Demand, and online streaming. New technology is allowing for more media consumption. Though the two studies show slightly different results, it is evident that children are spending more time with media in their lives, and as a result more time with commercial messages. A Federal Trade Commission (FTC) report estimates children from two to eleven years of age see an average of 25,600 television advertisements annually (Holt et al., 2007). Higher numbers have been used in supplementary research, such as 30,000 and 40,000 ads per year (Kunkel & Castonguay, 2012; Gunter et al., 2005). The four most commonly advertised categories to children are cereals, toys, candy/snacks, and junk food (Alexander, Benjamin, Hoerrner, & Roe, 1998; Calvert, 2008; Gunter et al., 2005).

Advertisers use similar methods to attract children to pay attention to their ads. Common advertising techniques also help make a product more favorable to kids. Gunter et al. (2005) identifies six common practices that mislead children in ads. The first technique is exaggeration of a product. Products are enlarged to seem life-size, featured

close-up to seem “larger than life,” and/or audio claims are issued in promotions such as “being the best.” Second is the fantasy technique usually featuring unrealistic situations or environments, magic, and cartoon animation. Appeal techniques are attractive to children. Most appeals fall into three broad categories including fun/happiness, taste/flavor/smell, and product performance. These common appeals are seen in more than two-third of all kid advertisements and are customary in the industry. The use of celebrities is also a tool used to “transfer” status from the celebrity to the product. Ads for children usually feature animated characters endorsing products that are later found on product packaging. Another technique is the use of metaphors in ads, which creates “strong visual images” in children’s minds. Metaphors are used mostly to help children recall the brand. Lastly, the use of special effects such as sound, camera angles, computer animation of products, and people interacting with animated figures, attracts children and builds excitement, wonder, and awe (Gunter et al., 2005). Schor (2004) mentions several other tactics that are not as commonplace, such as: marketing the cool factor and attitude (Schor, 2004), promoting nagging (McDermott et al., 2006; Schor, 2004), encouraging age compression (MacArthur, 2001; Schor, 2004), separate ad campaigns targeting parents and children (Schor, 2004), and trans-toying where ordinary objects are modified and sold to kids to be toy-like (Schor, 2004). As advertisers expand their reach to this market these techniques will eventually be used in other screen-based ads viewed on mobile phones, video mp3 players, tablets, and on the Internet (Chester & Montgomery, 2008).

Advertisers have been using controversial material in ads over the years (Calvert, 2008). The line between what is entertainment and advertisement is blurring (Moore,

2004; Kunkel & Castonguay, 2012). Children are not readily born with the ability to understand commercial messages; it is a process they develop (John, 1999; Calvert, 2008; Gunter et al., 2005). Children may not detect the persuasion in ads and do not understand the full scope and purpose of advertising at younger ages (Calvert, 2008; Gunter et al., 2005). Therefore, regulations have been developed to ensure that ads do not feature misleading content. In regards to television, the Federal Communications Commission (FCC) set guidelines in place to help protect children from harmful or deceitful advertisements. The Children's Television Act of 1990 (CTA) was enacted by Congress to promote educational broadcasting and limit the amount of commercial messages advertised to children. FCC allows no more than 10.5 minutes per hour during the weekend and 12 minutes per hour on the weekdays of commercial messages to be featured on networks, satellite, and cable operators to kids less than 12 years of age. Commercials must be separate from program content, selling of items by the announcer/host/character is not allowed in program content or the time slot after the program, and recently added guidelines restrict displaying web addresses in program material. However, rules and guidelines do not stop companies from getting ads to their audience. For example, both Viacom and Disney have been fined for showing more commercial material than allowed by the CTA (Calvert, 2008). Other than television regulation, the FCC is not responsible for commercial messages aimed at children on the Internet. The FCC's role online is limited. Congress enacted the Children's Internet Protection Act (CIPA) in 1998, which limits and monitors what children can see on public school computers and enforces Internet safety for students who use computers in libraries.

The Federal Trade Commission (FTC) is responsible for the Children's Online Privacy Protection Act of 1998 (COPPA) effective as of April 2000. The law protects privacy of children on websites. This protection, for those under the age of thirteen, promotes transparency, so companies disclose how they use, collect, and share a child's personal information. It also requires a parent be notified or involved if more information is gathered from a child than necessary. Currently few restrictions are carried over from television to the Internet (Calvert, 2008).

Children are venturing out into cyberspace more each year. Children enjoy the Internet because from their point of view it is free (Nairn, 2008). Clarke (2002) found that children are spending more time online when comparing data from 1997 to 2001. Twenty-five percent of children from eight to twelve years old said they found themselves online at least ten hours or more a week (Clarke, 2002). A survey conducted by the National Center of Education Statistics (2003) U.S. Department of Education revealed 67 percent of nursery school children use computers and 23 percent use the Internet. The numbers only increase with age, mentioning 95 percent of sixth to eighth graders as computer users, and 50 percent of them as Internet users. Rideout et al. (2010) revealed that older kids average 1 hour and 29 minutes daily on a computer outside of schoolwork. In addition, regardless of race or education of their parents, a majority of eight- to 18 year-olds have a computer and Internet access at home (Rideout et al., 2010). Children are using the Internet more, so it will only be a matter of time before a ruling is made to determine if the FCC has online jurisdiction to enforce regulations to American corporations and advertisers. Advocates for regulation desire a strict policy restricting advertisers from subtly sprinkling advertisements and promotions to young children

online, while corporations and big business desire to keep the Internet open without any restriction. This conflict mirrors the same concerns from the 1970's when an influx of advertisements began promoting unhealthy sugary cereals on television. Currently the Internet is mostly self-regulated with limitless options favoring advertisers (Cai & Zhao, 2010).

A study conducted by Valkenburg and Soeters (2001) established that children's top reasons for going online include downloading computer games and visiting entertainment websites. Research shows that children favor visiting commercial sites. Seventy-four percent of seven- to nine-year-olds named a commercial site as their favorite website, and only 13 percent of the respondents were able to recognize the purpose of the site was for advertising (Henke, 1999).

Websites are challenging to navigate especially for children mostly because there is no standard format or structure (Cai & Zhao, 2010; Easin, Yang, & Nathanson, 2006). A European study on ten popular websites for children (from seven to ten years of age) found these sites had advertising material that was difficult for children to distinguish as ads, click through links to an advertiser's website without notification, and a quarter used cartoon-like characters to sell products (Nairn & Dew, 2007). In addition, online information is delivered all at once, without organization or reason, which can confuse children trying to discern ads from content (Cai & Zhao, 2010).

Advertising has become an integrated part of children's lives. Advertisers are in the process of inventing new and skillful ways to target children online. Meanwhile, young children are exploring the Internet and encounter problems differentiating between what is entertainment and commercial advertising. New interactive marketing techniques

on the Internet, such as advergames, raise ethical questions about blending brand and product information in what seems like ordinary content to children.

2.2 The Effects of Advertising on Children

When researching effects of advertising on children there are two general focuses. One focus of research investigates how children learn and participate in the consumer process, which will be defined by this paper as the advertisers' "intended" message. The second approach focuses on how the exposure to advertisements affects children. This will be viewed as advertisers' "unintended" message. Research implies that children learn from advertisements, and their social roles, values, and behaviors are affected by what they hear and see (Young, 2008). The majority of this section will concentrate on the effects of advertisers' unintended messages.

It must first be noted that advertising is not in its own separate vacuum, but is part of a larger sphere of mass media influences such as TV programming, music, movies, Internet videos, gaming, and anything else that may be coming into popularity (Hust & Brown, 2008). Other influences such as a child's age, social class, and parent involvement are additional variables that must be taken into account when unraveling research on media effects (Gunter et al., 2005).

Advertising's intention is to "encourage consumption" (Young, 2008). As Gunter et al. (2005, p.89) states, "advertising is a source of consumer learning" about brands, product categories, and the overall role of a consumer in society. Kids learn about products and services because of their exposure to advertising, and with that knowledge partake in the exchanges of the marketplace while developing new information and

attitudes. Many studies have been based on brand and product relationship to determine if ads affect children's brand loyalty, recall, recognition, and purchase behavior (Gorn & Goldberg, 1980; Valkenburg & Buijzen, 2005; Van Reijmersdal et al., 2011; Gorn & Goldberg, 1982).

The content of advertisements may also affect children unintentionally. One topic of concern is violence in advertisements. A youth violence report released by the Surgeon General (n.d.) found viewers showed an immediate increase in aggressive behavior after exposure to media violence. Paik and Comstock (as cited in Youth Violence Report of the U.S. Surgeon General) analyzed media violence studies from 1957 through 1990, and found short exposures to media violence can cause physically aggressive behavior in young people. A study by Shanahan, Hermans, and Hyman (2003) on violence in TV programs, sponsor ads, and spot commercials found higher amount of violence in ads targeted to kids than in featured program content, this was attributed mostly to the sponsored program advertisements.

Brocato, Gentile, Laczniak, Maier, and Ji-Song (2010) recently studied violence in TV advertisements. Child participants felt that violence was mainly defined by blood shown. Children also felt violence had to be "realistic" in order to have a negative effect, which did not include animated characters. However, the participants who saw violent advertising and/ or violent programming, appeared to "generate more aggressive cognitions" than their counterparts who did not see violence (Brocato et al., 2010, p.104). In addition, Brocato et al. (2010) states that children's thoughts, feelings, and behaviors may be affected by viewing violent ads. This is a concern because children are exposed to violence while viewing advertising (Shanahan et al., 2003).

An unrealistic image of beauty is another effect stemming from advertising. Advertisements usually feature attractive people, and a majority of ads emphasize the importance of being physically attractive to others. Young children grow up conscious of how they look and how others perceive them, and as they develop may feel that ad standards of beauty are unattainable (Gunter et al., 2005; Cohan, 2001). This ad effect is found more commonly among females than males. Focus on physical attractiveness can affect children's views about their own self-image, body shape, weight, and self-esteem (Gunter et al., 2005). Martin, Gentry, and Hill (1999) performed a study on children and teenagers. Female subjects who had poor body image preferred ads with attractive models significantly more than females who had better body image. Girls with poor body image found ads with same-sex models more appealing. As a result the researchers concluded that, "it appears that ads with physically attractive female models are most effective (persuasive) in situations where they may contribute to harming a person's self-worth (girls with poor body images)" (Martin, et al., 1999, p. 181).

A similar appeal used in advertisements, which can cause negative ad effects is the thin body ideal. Advertisements not only focus on beauty and attractiveness, but also on body shape and weight. Studies in this area mostly focus on print advertisements featured in magazines, even though it is apparent in television and online ads as well. The thin body ideal is when media "glamorizes" slender (usually women) or muscular (usually men) body shape as supreme and to be idolized (Harrison & Hefner, 2011). Studies on teens and adult women have been done on eating disorders, body dissatisfaction, and dieting and how they relate to media influence (Harrison & Hefner, 2008; Martin et al., 1999; Ogletree, Williams, Raffeld, Mason, & Fricke, 1990).

The portrayal of women as sexual objects may also have effects on its audience. Magazine advertisements and beer advertisements most often feature women as decorative objects (Zurbriggen et al., 2010). The American Psychological Association mentions “sexualization” in media can have a negative affect on both girls and boys especially when lines are blurred between teenagers and adults in provocative images and/or featuring highly idolized young celebrity endorsers (Zurbriggen et al., 2010). The affects of advertisements and media on young girls can influence clothing choices, may promote the view of body as an “object” (Martin et al., 1999), and can encourage girls to participate in sexual behavior (Zurbriggen et al., 2010).

Social learning theory developed by Bandura, also known as social cognitive theory, is one possible explanation as to why children are affected by images, concepts, and ideals presented in ads. Social learning theory is how people learn in a social context through observation, imitation, and modeling (Baran & Davis, 2009). Bandura (2001) states that attentional, retention, production, and motivational processes govern observational learning. Attentional process is what is selectively observed during modeling or imitating which leads to the retention process. This is the active process of transforming the information observed to memory. Next comes the production process, where the behavior and “symbols” are stored and created, and developed into a course of action. Lastly, the motivational process is when the modeled event is acquired, but may or may not be preformed. After the behavior is observed and learned from another, a person will modify his or her own behavior accordingly. Children learn from the observed rewards and consequences of others. So, a child viewing an advertisement will move from attention, to memory, and then to motivation (Bandura, 2001). Children are

more likely to model an attractive person or someone who is being rewarded (Bandura, 2001). Identification with the model will more than likely increase the likelihood of children repeating what is seen or heard (Bussey & Bandura, 1999; Hust & Brown, 2008).

Other “unintended” effects potentially related to advertising are: materialism (Goldberg, Gorn, Peracchio, and Bamossy, 2003; Young, 2008; Pufall & Unsworth, 2004), nagging or pestering (McDermott, O’Sullivan, Stead, & Hastings, 2006; Robinson, Saphir, Kraemer, and Varady, 2001; Narin, 2008), encouraging bad food choices (Gorn & Goldberg, 1982; Hastings et al., 2003; Pufall & Unsworth, 2004), promoting age compression (MacArthur, 2001), and influencing the start of bad habits such as alcohol and cigarettes (Cohan, 2001; Brody, 1991 as cited in Gunter et al., 2005). These topics are also being examined in today’s media-filled atmosphere. Advertisers unintended messages can be potentially harmful to children who are impressionable, learning societal roles, and may look to media for guidance.

2.3 Advergames: Advertisement Through Entertainment

Not all games on the Internet are considered advergames. An advergame is an interactive game that features brand or product information in a game setting usually promoting excitement and fun (Moore, 2006). Advergames are usually confused with more common forms of advertising like product placements or game-in advertising, but they are not the same. A game-in advertisement is when a videogame sells a “spot” and features a brand, logo, or company (Waiguny et al., 2011). For example, a racing game may feature billboards in the backdrop with a Shell gasoline logo, which was purchased

by the company at a premium price, but the video game does not exclusively belong to Shell. Product placements are brands discretely planted in films or television shows (Kretchmer, 2004). On the other hand, an advergaming is a free casual game, sponsored by one company, and is usually located on its website. An advergaming always contains a positive brand message because its purpose is to increase consumer recall about the specified brand or service, as well as increase visits to the company website (Waiguny et al., 2011).

Advergaming is an upgrade from traditional advertising methods. Television commercials are expensive to produce costing production time and airtime. After viewing an ad, it can potentially take days or weeks for a customer to reach point of sale, but with advergaming it takes merely seconds to navigate from the advertisement to the product (Nairn, 2008). Advergaming is inexpensive to create, are usually hosted on the company website (requires no additional cost for advertisement), and gets constant exposure. Television and radio commercials send one-way messages, but with an advergaming, consumers interact with the brand (Van Reijmersdal, Rozendaal, & Buijzen, 2011). Advertisers are taking notice of the benefits with interactive gaming because it is increasing in popularity (Montgomery, 2012). Advertising firms such as Young & Rubicam and Starcom Media are incorporating video game divisions to meet the growing need (Moore, 2006). Border (2009), as cited in Waiguny et al. (2011), found over 229 advergaming included on over 77 major food brand websites. In addition, companies like General Motors, Pepsi, and Panasonic all recently used advergaming to promote their brands (Bertrim, 2005; Kretchmer, 2004). According to DFC Intelligence, an entertainment and marketing research firm specializing in the gaming market, one billion

dollars was spent in 2010 on advertising products and services in video games. The figure is estimated to double and continue increasing over time in the U.S. market. Globally the video game industry saw consumer sales reach \$67 billion dollars in 2010, and by 2016 is expected to increase to \$81 billion. DFC Intelligence estimates that advergaming will be a major contributor (along with “around game” advertising) to 78% of total video game advertising revenue in 2016.

Youth from the ages of eight to 18 spend an average of one hour and thirteen minutes a day playing video games (Rideout et al., 2010). Now with Internet connection on mobile phones and portable devices, advergaming is available to children almost anywhere. Children are attracted to advergaming websites because they are able to explore, play, and have fun (Moore, 2006). Advertisement games mainly involve eye/hand coordination, memory, or spatial skills like puzzles. Some games include personalization or customization as a way to engage the player (Moore, 2006). Sometimes a bond is created with the brand based on “the emotions of winning or losing” the game (Nairn, 2008). Different tactics and strategies are used by the brand to encourage longer play on the website: creation of multiple levels, play again button, future game recommendations once the game is completed, posting high scores to increase competition, and rewards such as points, that open up new levels or secret games (Moore, 2006; Dahl, Eagle, & Baez, 2009).

Companies on the other hand, favor advergaming for the multitude of benefits, a major one already mentioned, cost effectiveness (Moore, 2006). Once an advergaming is created, 100% of the time spent in the game is advertising (Calvert, 2008). The games bring constant exposure to the brand’s website. Brands have the ability to track user

behavior, collect data on players, and measure impact through advergimes (Moore, 2006; Calvert, 2008; Gurau, 2008). Collecting data on advergime players gives companies an edge. The feedback information collected can be used immediately to improve games, website, and products. Lastly, advergimes are a good way to introduce new products or brand extensions to the market (Waiguny et al., 2011).

Advergimes are used to develop a positive brand relationship with the customer, which works due to a larger acceptance of games over other online advertising methods. Research shows 81% of players who enjoy a game online will forward the game onward to friends, and this gives advergimes a viral/ buzz marketing appeal (Gurau, 2008). If a game goes viral, the brand receives more awareness among the online community and effectively increases visibility. Waiguny et al. (2011) states a game going viral is strongly related to how the child feels about the game and if it is entertaining. If entertainment and game attitude are high, then it is more likely to ensue repeat visits and friend recommendations. Younger children are more influenced by advergimes than older children, who in the study were less entertained. Attitude to the game also influences children's perception of the brand. A different study conducted by Van Reijmersdal et al. (2011) also found similar results. The study measured the effect of brand prominence, involvement, and persuasion knowledge of children (seven to 12 years of age) and advergimes. Children who were more involved with the game demonstrated spillover. A spillover happens when a person develops a positive attitude or response to a game and then transfers it to the brand. In regards to prominence, a brand logo prominently displayed in an advergime produced higher recall and recognition. The prominence of the logo did not affect children's response toward the game, which may be

because children were using all their information processing skills to play the game instead of critically evaluating the brand logo and its purpose. Children also showed limited persuasion knowledge about advergames. Sixty percent of the children included in the study did not understand advertisers created the game, and only 57% understood its persuasive intent. Children failed to recognize who created the games and why they were placed online.

A focus group study in the United Kingdom with children from ages seven to fifteen discussed online advertisements in depth. When advergames were mentioned, a fifteen-year-old boy stated, “that’s not an advert[isement] because it says play” (Nairn, 2008, p. 247). The study found that children felt “tricked into the game” even though the word “ad” labeled the game at the bottom in small letters. Overall, children felt advergames were featured on the website for entertainment purposes only, and did not understand the purpose of the game was to persuade or promote a brand. Parents of the children also felt advergames were deceptive and unfair in nature. Children playing advergames are also vulnerable to give personal information about who they are or their preferences, which can be used by companies to develop products of long term dependency (Gurau, 2008).

Advergames are common on children’s websites. Companies encourage game play, while having extensive exposure to products just a click away, moving a child from playing to product browsing (Calvert, 2008). The question being asked is how are these advertisements influencing children. The increase of commercial messages exposes children to brands and products, but also to alternate values, beliefs, and unrealistic

environments. Some ad messages do not carry positive undertones, but may teach children negative customs and tendencies.

2.4 Gender Stereotypes

Gender stereotypes are generalizations of traits, activities, attributes, and expectations believed to be linked to biological sex (Browne, 1998). These gender stereotypes can be ascribed to objects (trucks are for boys), roles (women cook and clean), or behavior (crying is for girls), but do not convey accuracy only assumption about individuals as a whole (Cunningham & Macrae, 2011). Stereotypes place gender expectations of what it is to be male or female (Browne, 1998; Bakir & Palan, 2010). Gender identity, the identification with masculine or feminine personality traits, develops early in life as children are looking for clues about societal orders (Palan, 2001; Martin & Ruble, 2004).

Gender development helps to understand how children develop and apply stereotypes. Bakir and Palan (2010) reviewed previous gender research and identified gender role development stages in children. The first stage is awareness. This stage is comprised of children three and younger. Children become aware of biological sex, and by three years old are aware that gender stereotypes exist. The next stage is comprised of four to seven year olds. Gender schemas (structures) are formed and influence a child's behavior and thoughts. Socialization and exposure to external factors increases the knowledge of gender stereotypes, and their attitudes are firm and rigid. By this age children now realize their biological sex cannot be changed (gender constancy is developed) and show preference for gender-specific toys. The third stage found in eight

to eleven year olds is an openness to gender flexibility. Gender flexibility constitutes applying gender roles and attributes to females and males, not exclusively one or the other. Children show understanding of variation between genders and similarities, and they begin to exert flexibility with others and themselves. At this stage other children may engage in gender flexibility roles, but they may be reluctant to participate for him or herself. The last stage is moving from childhood and entering adolescence. Acceptance of gender role flexibility increases, with girls potentially being more adaptable than boys (Bakir & Palan, 2010; Martin & Ruble, 2004; Trautner, 1992).

Children learn gender roles and expectations from social settings and by observing others including family members, friends, caregivers, teachers, and schoolmates (Hust & Brown, 2008). However, with increasing media participation at young ages children also mimic and/or model what is seen in media (Bussey & Bandura, 1999; Hust & Brown, 2008; Ruble et al., 1981; Smith, 1994; Kahlenberg & Hein, 2010). Furthermore, gender stereotypes are portrayed and usually exaggerated in the media. Anand & Krosnick (2005), as cited in Hust and Brown (2008), found that boys and girls consume the same types of media content till around six years old (one exception noted is video games, which is mostly played by males). As children get older, gendered media selection increases as gender schemas develop and as advertisers produce content targeting a specific gender (Hurst & Brown, 2008).

Societal norms dictate what is appropriate for girls and boys, and most gender stereotypes are archaic in nature and do not properly reflect current trends and progressions (Hust & Brown, 2008). Yet, stereotypes are supported by their constant use in media (Bakir, Blodgett, & Rose, 2008). Studies on gendered media include a variety

of outlets such as: books including illustrated children's books and coloring books (Taylor, 2003; Fitzpatrick & McPherson, 2010), magazines (Miller & Summers, 2007; Hurst & Brown, 2008), newspaper (Glascock & Preston-Schreck, 2004), radio (Hurtz & Durkin, 2004), movies (Hoerner, 1996), music (Hurst & Brown, 2008), video games (Robinson, Callister, Clark, & Phillips, 2009; Beasley & Standley, 2002), and television (Powell & Abels, 2002; Browne, 1998; Kahlenberg & Hein, 2009). Also, heavy consumers of media are exposed to larger amounts of gender role stereotypes and display more gender misconceptions than light viewers (Bussey & Bandura, 1999; Signorielli, 2012). In addition, a study in Hong Kong on television and stereotypes found users who watched entertainment programs showed higher levels of female stereotypes (Fung & Ma, 2000).

Hurst and Brown (2008) compiled a list of common gender roles found in children and adolescent media. Males are seen and heard more often in media than women, and are more likely to be the main character or in charge. Males are typically presented as: the hero, in control, strong, muscular, dominant, adventurous, powerful, and violent. Women conversely are often portrayed as: passive, weak, affectionate, emotional, slender, sexy, reserved, and need to be saved from distress. Fung & Ma (2000) created a gender stereotype index with males described as risk takers, leaders, having a strong personality, independent, aggressive, and assertive. On the other hand, females were described as shy, sensitive to other's needs, gentle, compassionate, affectionate, and understanding. Popular media perpetuates these views of men and women, and society accepts them as gender-typical behavior (Bakir et al., 2008) even if it disregards the diversity and reality of the world around it.

A common gender stereotype found in media is the beauty myth, and women featured as beautiful and thin (Hust & Brown, 2008). One study on commercials featuring attractiveness and beauty were more likely to be directed at women, featured mostly female models, and the attractive-based messages were associated more with females than males (Downs & Harrison, 1985). Media also tends to portray women and girls as concerned with their appearance and in more domestic settings (Signorielli, 2012). Female characters or models on television are usually shown enhancing or focusing on their appearance (Signorielli, 2012). Ogletree et al., (1990) found that appearance enhancing was mainly in commercials directed at female consumers.

Another gender stereotype involves color associations. The mentality that pink is for girls and blue is for boys exposes children at a young age to gender stereotypes. A content analysis performed in the United Kingdom on toy and clothing catalogs for children found gender stereotypes and traditional color associations. The study found strong gender bias, pink for girls and blue for boys, within the product catalog. Hull, Hull, and Knopp (2011) found similar color associations within product pictures marketed to children, and male images relating to activity and female ones to passivity. Research on television commercials targeting children showed different results with more than half of the commercials featuring mixed colors and bright or neon colors, instead of traditional gender specific colors (Kahlenburg & Hein, 2010).

Advertisements for children usually focus on targeting only one gender, which makes ads either male-oriented or female-oriented (Browne, 1998; Kahlenburg & Hein, 2010; Larson, 2001; Smith, 1994). A study by Kahlenburg & Hein (2010) on gender role stereotyped commercials confirms dolls and stuffed animals were featured in girl-only

commercials, and action figures and transportation/construction toys were featured as boy-only commercials. Schor (2004) states that the toy industry purposely segregates boy from girl toys and markets to each gender accordingly. Toys “R” Us is one example of a company that has advertised products as boy or girl appropriate based on gender stereotypes, and received complaints from consumers (Landes, 2009). Bakir et al. (2008) researched findings on children’s response to gender stereotypes TV commercials and concluded that ads do not have to be sex specific, and advertisers could effectively market to both boys and girls with one theme. The gender stereotypes held by children are “superficial” and “surface level” (Bakir et al., 2008).

Television advertisements main focus is to sell products. However, thirty- or sixty-second commercial spots can provide “condensed” gender portrayals for children (Allan & Coltrane, 1996). Gender stereotyping in advertisements is a focus of this study due to the potential impact on societal roles, and those roles’ ability to limit children’s values and identities. Traditional research on advertisement commercials revealed twice as many boys than girls in active and dominant roles, and male voiceovers were used more than female voiceovers (Browne, 1998). The question is as time progresses, are stereotypes featured in advertisements decreasing? Recent studies show mixed results.

Allan and Coltrane (1996) compared gender representations in TV commercials from the 1950s and the 1980s. The researchers were trying to investigate longitudinally if traditional gender roles have lessened in advertisements. Males still showed prominence as the main character and narrator/voice-over in both the 1950s and 80s. Nevertheless, the commercials in the 1980s showed women more favorably than in the past. Women were shown as part of the workforce (and less likely to be shown

parenting), outside the home more often, and featured what would be considered stereotypical “masculine” traits. This study shows some equal representation and improvements for women, yet little change is seen in male characters.

A content analysis by Browne (1998) found children TV commercials featured more male than female characters, and male voiceovers were common even in gender-neutral product ads. Girls were only shown with products typically labeled as “girl products” and boys were not shown in girl-only ads. In commercials featuring both boys and girls, boys were shown as the demonstrator of how a product worked including gender-neutral products. In regards to gender portrayal, boys were more likely to be shown as aggressive and dominant and girls as composed, shy, and giggly. A study from the same year by Larson (2001) found different results. Larson established that boys and girls shared almost equal amounts of time in TV advertisements analyzed in 1997. Even though traditional gender roles were still evident showing females as cooperative and males as competitive with high amount of boy-only commercials featuring violence and aggression. The two studies provided varied results. One can conclude that TV advertisements may be featuring females more often, but that gender roles and portrayals are still evident in both boy and girl characters.

Maher & Childs (2003) examined TV commercials targeted at children from the 1990s and 2000s. Most ads from the 2000s were gender neutral. Ad orientation compared to previous studies showed (excluding Browne 1998 previously mentioned) favorable results with more neutral ads and a decrease of male-only oriented commercials. However, the main product user was male even in ads with mixed gender groups. Male voice-overs were used in male-only and neutral ads, while female voice-

overs were not used in any male-only ads. Main characters were mostly male and many ads had no main character at all. Though male participation was high in this study, a comparison with previous studies from the 1980s and 90s shows that male dominance in ads is on the decline. The results can be interpreted as favorable and a potential trend towards equal representation of females in commercials. An additional positive observation is the increase of mixed gender representation in commercials. These can be taken as signs that gender stereotypes are slightly decreasing in children commercials. Advertising targeted at children via television, shows a slight decline of gender stereotypes. Similar results may be seen in new media such as online advergmes.

Currently, studies in advertising effects and gender stereotypes were only performed in traditional media forms. In order to continue documenting patterns and progress in the field of advertising effects, research should be extended to the online arena. Advergmes are similar to TV commercials, as both feature similar tactics such as colors, effects, characters, and themes to appeal to children. Both commercials and advergmes have the same goal in mind for children, which is to turn them into loyal consumers of the target brand or product. The lack of information pertaining to online media and advertising effects shows a gap in the knowledge, and therefore this study proposes a closer examination of advergmes and gender stereotypes. First, it is important to explore whether gender stereotypes are featured in advergmes directed at children. Television commercials seem to produce a modeling effect where younger children learn about gender roles, and imitate gender behavior in advertisements (Ruble et al., 1981), so it is plausible that advergmes may produce this same effect. Therefore, the following research questions are proposed:

RQ1: Do advergimes feature gender stereotypes?

RQ2: Are there more advergimes targeting females or males?

RQ3: What gender stereotypes appear most often in female-only and male-only advergimes?

RQ4: What percent of advergimes are gender-neutral?

Chapter II: Methods

Sample Selection

The research objective was to analyze advergimes featured on toy manufacturer websites. The website, www.finance.yahoo.com, was employed to gather toy manufacturer information. The top two toy manufacturers Mattel and Hasbro, as measured by market capitalization and sales, were chosen for research. As of January 2012, Mattel's website had 181 advergimes and Hasbro had 76 advergimes. The mattel.com website featured a button at the top of the web page labeled "games," once clicked, all interactive games were listed in no specific order. The hasbro.com website also featured a button at the top of the page labeled "play." Once the button was clicked, it redirected the viewer to a separate Hasbro sponsored website called www.hubworld.com. Interactive games were found under the game button featured at the top of the website, and were listed by category. A coding sheet was developed in advance for analysis (see Appendix A).

Measures

A coding sheet was created with specific gender stereotypical categories. The coding sheet was created from previous content analysis studies on gender stereotypes.

Due to the nature of advergames being a unique and interactive form of advertisement, several variables were gathered from various traditional media and adapted for this study.

The following list includes all the variables examined:

Ad Orientation

Ad orientation, modified from Maher and Childs (2003), was coded as the gender or (target consumer) that most people would think of as most appropriate for the product. Each product or brand was searched on the manufacturer's purchasing website, and it was coded accordingly if found under girls, boys, or neither. Gender neutral was coded for products that could be for either male or female children. Available options included: female, male, or neutral.

Type of Game

Games were coded as educational or entertainment based. The objective of an educational game is to inform, encourage learning skills or concepts i.e. numbers/ math, colors, shapes, etc. An entertainment game's main objective is to amuse the player with fun and enjoyment. Available options included: educational, entertainment, and unclear. This variable was not used in previous studies, and was later found to be irrelevant and data was not used in final findings.

Age of Game Player

It is difficult to determine the age of game players. Therefore, the manufacturer website was used to determine an approximate age. For systematic purposes, each product/brand featured in an advergame was searched for in the manufacturer shop, and the age listed on the website (i.e. for ages three and up) was used to determine the advergame player age. If the product website featured several different age ranges, the

age range used most often was recorded. This method has not been used in previous studies, but was utilized in this study as a way to systematically record potential player age. Available options included: 1-3 years old, 4-6 years old, 7-9 years old, 10 years of age and older, and age unclear.

Main Character- Character Type

Character type was modified from Fitzpatrick and McPherson (2009) and Robinson et al., (2009). A main character is part of the main storyline in the game, and/or is the prominent reoccurring character that is showcased in front and center, and/or is the primary character in focus while the other characters are featured as part of the background or smaller. In cases where the main character is only shown at the beginning of the game and is not visible afterwards (i.e. race car driver inside of a race car) the main character was coded with the available information. If a main character is not established the game piece was coded as the main character, and if no game piece was used then it was labeled not applicable. Characters that were human-like (i.e. fantasy characters like a witch) were coded as human. Man-made characters included robots, cars, trucks, and any other object made by humans. Available options included: human, animal, man-made, unclear, and not applicable.

Main Character- Age

Main character age was modified from Fitzpatrick and McPherson (2009). This category was based on appearance and behavior of character (i.e. adult facial features, type of clothing worn, physical size of character, and voice). Available category options before pre-test were baby, child, adolescent, and adult. Available options after pre-test included: youth and below, adolescent and older, unclear, and not applicable.

Main Character- Gender

Main character gender was modified from Fitzpatrick and McPherson (2009). Characters were coded based on clothing, hairstyle, facial features, physical stature, and any other characteristics, which may assist in determining gender. Available options included: female, male, unclear, and not applicable.

Supporting Character(s)

Supporting characters was modified from Robinson et al., (2009). A supporting character is a minor character that was shown in the storyline or in the game, but was not central to the plot. Supporting character or group was coded only once and was noted after the game was complete, that way all minor characters were documented. Available options included: supporting character(s) female, supporting character(s) male, supporting character(s) mixed gender, supporting character(s) gender unclear, and not applicable.

Main Character- Body Portrayal

Main character body portrayal was modified from Robinson et al., (2009) and Thompson and Gray (1995). Body size for each main character was determined by comparing the character's body size to Thompson and Gray's Contour Rating Drawing Scale. To determine body size for some characters that were difficult to tell between one body size category and another arm, leg, and waist comparisons were made to determine the appropriate category. Available options included: thin, average, overweight, unclear, and not applicable.

Main Character- Activity

Main character activity level was modified from Browne (1998) and Fitzpatrick and McPherson (2009). Activity level was coded only for the main character. If a character was engaged in movement (i.e. running, climbing, walking) or if they were shown passive (i.e. standing around or sitting) was recorded. In cases where the main character was not visible during actual game play (i.e. the player was a car in which the main character is presumed to be inside) the activity level was coded as not applicable. Available category options before pre-test were static, busy, and active and then were modified. Available options included: active, passive, unclear, and not applicable.

Color

Color was modified from Cunningham and Macrae (2011) and Kahlenberg and Hein (2010). The color majority (51% or more) was coded including text, images, and all objects. The term “color mixed” was used for coding if an advergaming had a balance of many different colors without one color sticking out more than the other. Available options included: pink, blue, pastels (i.e. lights), brights and neons, neutrals (brown, khakis, grays, and black), mixed, and unclear.

Appearance

Appearance was modified from Ogletree et al., (1990). Characters were coded for enhancing the way they looked (body, face, or hair) or if the player was given options to enhance the look of a character (i.e. accessorizing with clothes, jewelry, make up, hairdressing). Available options included: accessorizing, grooming, other, or not applicable.

Main Character- Female Sexuality

Main character and female sexuality was modified from Robinson et al., (2009) and Beasley and Standley (2002). Clothing worn by the main character was coded (female characters only). Any of the categories were chosen if the character's attire fit the description. Sexuality category once included breast size (flat, average, voluptuous) and was later removed after pretesting for irrelevance. Available options included: fully clothed/ loose fitting, fully clothed/ tight fitting (i.e. revealing body shape), midriff showing, low-cut shirt (i.e. cleavage showing), revealing article of clothing (i.e. mini skirt thigh high, mini shorts thigh high, short dress thigh high, bathing suit, or any clothing emphasizing the body or legs), unclear, and not applicable.

Traditional Gender Role Female

Traditional gender role for females was modified from Fitzpatrick and McPherson (2009). Any character that was found doing an activity that would constitute a traditional female gender role such as caretaking, cooking, sewing, caring for an infant or animal, grocery shopping, being a teacher, and being a nurse. Available options included: care taking, other, and not applicable.

Gender Portrayal Male

Gender portrayal male was modified from Fitzpatrick and McPherson (2009). Any character that was found doing a dangerous, adventurous, or adrenaline filled action that would constitute a traditional male gender dominated activity such as racing, wrestling, rescuing, driving heavy equipment, and engaging in war/battle. Available options included: danger, other, and not applicable.

Main Character- Male Strong

Main character males coded as strong was modified from Robinson et al., (2009) and Thompson and Gray (1995). Muscle definition of the main character was coded (male characters only). Using the Contour Drawing Rating Scale defined by Thompson and Gray (1995) to define weak and average muscle definition. Large muscles were defined as arm muscles that are exaggerated and overly defined in shape, chest in a broad v-shape, and/or showing defined abdominal muscles. Available options included: weak, average muscles, large muscles, unclear, and not applicable.

Violence and Aggression

Violence and aggression was modified from Larson (2001) and Robinson et al., (2009). Violence and aggression was categorized as: any character that caused or attempted to cause physical injury or death to another character, thing, or object (i.e. killing, hunting, shooting, stabbing); verbal aggression (i.e. angry commands, insults); hitting or attacking an object; and prominent injury of an object or person. Violence and aggression did not include actions produced while a character was engaged in a sport activity. If the game featured weapons (i.e. sword, club, knife, gun) they were also coded, and if the game featured blood it was noted as well. Available options included: violent/aggressive acts, other, weapons, blood, unclear, and not applicable.

Procedure

An undergraduate from Florida International University's business school, unrelated to this study, volunteered to help pretest the coding sheet. The coder was trained extensively on the variable definitions and on how to use the coding sheet. A pretest was administered where the coder selected ten random numbers from one through

257. The numbers selected were the advergAMES used to pretest the variables and address any questions or inconsistencies. As mentioned in the previous section, some variables were adjusted or removed to fit the study. The volunteer coder and researcher coded an additional five random games from the sample and achieved intercoder reliability of 97.37%. Once reliability was established the researcher coded the remaining advergAMES.

All advergAMES featured on Mattel's and Hasbro's websites were analyzed in a three-week period from the second week of January 2012 until the first week of February 2012. AdvergAMES were analyzed in a short timeframe, so neither company would have an advantage or disadvantage of having more or less games added or removed from the company website. All games were first tested to see if they met the criteria as an advergame. Only games that had recognizable brand, logo, and/ or product were used in the study, and all other games were discounted and removed from the sample. To ensure brands represented in advergAMES were associated with a product, the researcher performed a brand search on the company website to verify that a product was being sold under the name. A content analysis was utilized to examine the gender stereotypes featured in each advergame. All advergAMES were played for exactly five minutes or until the first stage of the game was complete. Once data collection was complete it was tabulated and analyzed to determine results.

Chapter IV: Results

Out of 257 interactive games on Mattel's and Hasbro's websites, 58 games were either malfunctioned or not considered advergAMES, making 199 the total number of

advergames analyzed. Due to the lack of educational games represented this variable was eliminated from the study. For the most part, advergames were entertainment based.

This content analysis found that advergames are predominately either girl-oriented or boy-oriented. Table 1 shows a sample list of advergames targeted at each gender and includes gender-neutral titles. In order to approximate the age of the game players all brands and products were reviewed on the manufacturer websites to give insight into the targeted age range of children who would be visiting and playing advergames.

Table 1

*Sample List of Advergames by Game Title According to Ad Orientation**

Girls-only	Boys-only	Gender-neutral
Barbie Bike Stylin' Ride	Aerial Attack Robot Swarm	Family Game Night Monopoly
Littlest Pet Shop Kitty Candies	Battle Force 5 Sonic Swarm	Family Game Night Yahtzee
Snip 'n Style Salon	G.I. Joe Renegades Tactics	Little People What's Different
Strawberry Shortcake's Berry Bitty Adventures Fashion Show	NERF N-Strike: Reconnaissance	Pictureka! Pictureka!
Super Wedding Stylist	Transformers Energon Within	Scrabble Showdown SCRABBLE Flash

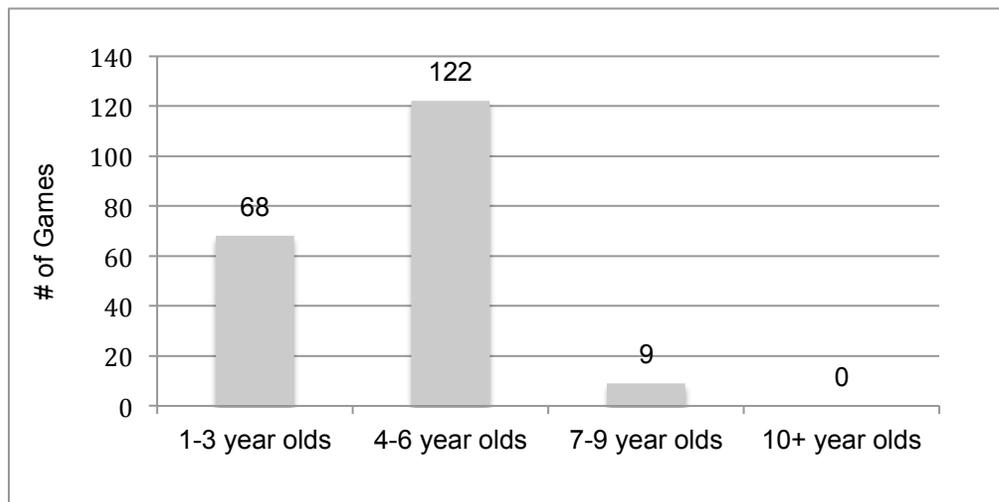
* Ad orientation refers to advergames targeted to a specific gender

As indicated by Figure 1, a majority of the games were geared towards children from four to six years old. Further filtering by gender showed that female games are more likely to attract younger players between the one and three age range (63), while for the male games an estimate age is between four and six years old (73). Gender-neutral games may attract older and younger children from four to six years of age (10), and

seven to nine years of age (8). No advergimes were found targeting children ten years old or older.

Figure 1

Advergimes Estimate Age of Users Determined By Product Appropriate Age



In regards to main characters, the most popular form (115) in advergimes was human. Other main character types included man-made (46), animal (19), not applicable (15), and unclear (4). It is interesting to note that 100% of man-made characters were featured in boy-only advergimes. Human characters skewed older 74.78% were adolescents or adults, while younger human characters were used significantly less in advergimes 18.26% of the time (age unclear was 6.96%).

To address RQ1, five gender stereotypes themes were selected to determine if stereotypes are featured in advergimes. For females the five gender stereotypes included: body of the main character portrayed as thin, main character activity featured as passive, game color dominance pink, character enhancing outward appearance, and traditional female gender role representation. For males the five gender stereotypes used

were the following: main character shown with large muscles to show strength, main character activity featured as active, game color dominance blue, male gender role portrayal involved with danger and/ or adventure, and game including some form of violence and/ or aggression.

Table 2 shows the percentage of advergAMES featuring stereotypes. From the 199 advergAMES analyzed 155 (77.89%) of them featured at least one or more gender stereotypes (there were no games that featured all five stereotypes). AdvergAMES for both females and males featured up to four stereotypes per game. To address RQ1, based on these findings there is substantial evidence to say that gender stereotypes are found within advergAMES.

Table 2

Percentages of AdvergAMES With and Without Gender Stereotypes

Gender Stereotypes	%	N
4 gender stereotypes	6.03	12
3 gender stereotypes	15.58	31
2 gender stereotypes	23.62	47
1 gender stereotype	32.66	65
0 gender stereotypes	12.56	25
Gender-neutral	9.55	19
Total games featuring one or more gender stereotype		155

N Number of games, %=Percentage of advergAMES with stereotypes

As for ad orientation, Hasbro featured 21 advergAMES targeted directly at females only, while Mattel targeted 81 games. For males, Hasbro featured 18 boy-only advergAMES and Mattel featured 60 games. So, referring to RQ2 female-only games

equaled to 51.26% (102) of all advergaming and 39.20% (78) were male-only games. In total there were more girl-only advergaming than male-only.

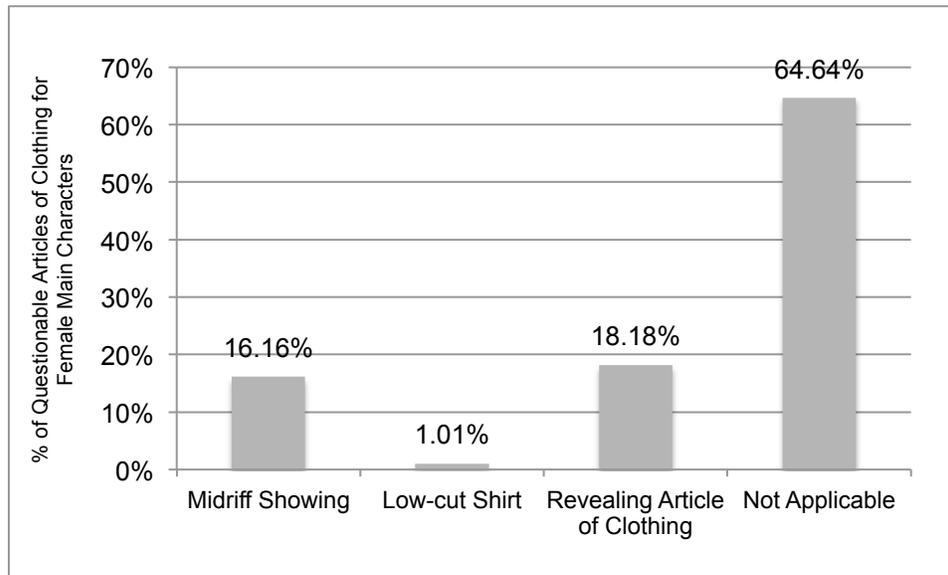
Gender stereotype literature usually measures how many main characters were female versus male to determine if both genders have equal representations in advertising. The female gender represented 49.75% of the 99 main characters in advergaming. Males represented 17.59% of the 35 main characters. Characters that had no gender association represented 29.15% of 58 main characters, and 3.52% of the remaining 7 characters were marked gender unclear. Though not statistically significant, two male advergaming featured female main characters and one male was featured as the main character for a female-targeted advergaming.

Out of the 102 female-only games 96 (94.12%) featured a female main character. The supporting characters were also more likely to be female (38.24%) or were not likely to feature any supporting characters (44.12%). Males (4.9%) and mixed gender groups (9.8%) were hardly shown as supporting characters for female games. Body portrayal for lead female characters were often depicted as thin 50% of the time and average 25% of the time. No female main characters were featured as overweight. Female characters were shown as engaged in activity 32.35% (33 total games) of the time and more often were found being passive 46.08% (47 games). One-third of the female-only games featuring main characters were marked unclear (2.94%) for coding activity and not applicable (18.63%). In regards to color, pastels and pink dominated female specific advergaming. Pastels constituted 54.90% (56) of female-only games, pink 29.41% (30), mixed colors 7.84% (8), blue 5.88% (6), brights/neon 0.98% (1), and neutral 0.98% (1). It is important to note that the use of pastels and pink were used 100% in girl-oriented

advergaming. In girl-only advergaming, character's focused on their appearance by accessorizing (20), grooming (14), and (2) other. Combining all acts that were based on appearance, 35.29% of girl-only advergaming featured an act of beautification to the face, hair, or body. This variable was only found in girl-oriented games and was not seen in male-only or gender-neutral advergaming. Main characters featured in traditional caretaking gender roles only represented 8.08% (8), plus another 3.03% (3) for the other category, but for the bulk of main characters (88.88%) this variable was not applicable.

In regards to women main characters and their articles of clothing, most main characters were found to be wearing loose clothing 45.45% (45), fully dressed tight fitting clothing 30.30% (30), not applicable 14.14% (14), and unclear 10.10% (10) in advergaming. These female main characters were also coded separately for articles of clothing that were sexy and/or revealing (see Figure 2). In regards to sexualized clothing there were three main categories, and 18 main characters were featured with an article of clothing that brought attention to exposed skin (i.e. legs and thighs), one to the breast area, and 16 brought attention to the abdomen region. In total 35.35% of female main characters were found wearing revealing clothing.

Figure 2

Female Main Characters and Sexuality

To address RQ3a, Table 3 indicates the amount and percentage of advergames that feature gender stereotypes in female-only games. The gender stereotype that appeared most frequently in girl-only games was body portrayal of female characters as thin. Female main characters were also shown as passive in a large majority of advergames.

Table 3

Top Five Female Gender Stereotypes in the Literature

Stereotype	%	N
Body Portrayal Thin	47.06	48
Passive	46.08	47
Appearance	35.29	36
Color Pink	29.41	30
Caretaking	10.10	10

N Number of games, %=Percentage of advergames

A male main character was featured in 41.03% (32) of male-only advergaming. Male-only advergaming featured 53.85% (42) main characters, which had no gender, 2.56% (2) were marked gender unclear, and 2.56% (2) featured female lead characters. Of those advergaming featuring main characters, 69.23% did not have any other characters in the game. If a supporting character was featured in the game it was more than likely male (24.36%) and there was no instance where a female was the only supporting character. A mixed group of males and females as supporting characters (5.13%) and one game marked gender unclear (1.28%) were statistically insignificant for male advergaming.

Body portrayal was coded for males for comparison purposes. Male main characters were shown as thin 3.85% (3), average 23.07% (18), unclear 10.26% (8), and not applicable 62.82% (49) of the time. According to this data, when male characters are human they are more likely to be portrayed as average (23.07%) than female main characters that are portrayed 50% of the time as thin.

In regards to activity, 70.51% (55) of male main characters were labeled not applicable because many of them were man-made and some of characters that were human were not physically present in the game to code activity level. For the male characters featured in male-only games 20.51% (16) were seen as active, 5.13% (4) as passive, and 3.85% (3) were coded unclear. For strength and body portrayal of the male characters 40.62% (13) were shown with large muscles, 21.88% (7) were marked unclear, 18.75% (6) not applicable, 15.63% (5) as average, and 3.13% (1) as weak. Male gender portrayal, in which characters were engaged in danger or action-filled roles, was found in a majority of games: danger 70.51% (55), other 5.13% (4) and not applicable 24.36%

(19). Male-only advergAMES featured violence and aggression in 37.18% (29), 10.26% (8) were marked other, 51.28% (40) did not have any acts of violence or aggression, and 1.28% (1) was labeled unclear. To get a clearer percentage of how many games did feature violent and aggressive acts, all acts of violence and aggression were totaled including the other category. Male-only advergAMES featured a total of 47.44% of violent/aggressive content. Twenty-four games featured weapons (30.76%), and none of the games featured blood. All acts of violence and aggression were found in male-only games, and none were found in female-only or gender-neutral games. In regards to game colors, male-only games featured neutral colors 43.59% (34), blue 23.08% (18), mixed colors 16.67% (13), brights and neons 12.82% (10), and 3.85% (3) were labeled color unclear.

To address RQ3b, Table 4 indicates the amount and percentage of advergAMES that feature gender stereotypes in male-only games. The gender stereotype that appears most frequently in male-only games is gender portrayal male engaging in roles that involve danger and adventure. Also deserving mention is the large amount of male-only advergAMES that feature violence and aggression. These male attributes fit the traditional “tough and strong” gender stereotypes found in most media.

Table 4

Top Five Male Gender Stereotypes in the Literature

Stereotype	%	N
Gender Portrayal Male	75.64	59
Violence/Aggression	47.44	37
Active	20.51	16
Color Blue	23.08	18
Body Portrayal Large Muscles	40.62	13

N Number of games, %=Percentage of advergAMES

The final research question (RQ4) referenced how many advergimes were considered gender-neutral. Nineteen total games (9.55%) were labeled as gender-neutral. In addition, there were 25 games specifically targeted at the male or female gender that did not include the five main stereotypes. Seven of the advergimes were targeted at males and 18 were targeted at females. Though the toys were targeted to a specific gender, these advergimes were found to be void of gender stereotypes, which makes the advergimes neutral. These games, though only 12.56% out of the total, are ideal because they do not perpetuate gender stereotypes to children.

Chapter V: Discussion

This study sought to examine gender stereotypes and their presence in a popular form of advertising found online known as advergimes. As a foundational study, the purpose was first to establish if advergimes featured gender stereotypes, and if so which ones were more prevalent. The findings revealed a considerable amount of evidence that gender stereotypes are found in advergimes produced by the toy industry. Gender stereotypes on the Mattel and Hasbro websites are common with over 77% of games featuring at least one gender stereotype. Whether gender stereotypes are purposely placed in advergimes is unknown, but they do affirm some unrealistic notions about men and women in society. Some of the study's major findings are listed below.

Gender stereotype literature usually examines gender of the main character, gender of the product user, and gender associated with the product or service (ad orientation) to help determine if stereotypes are frequented in advertising (Maher & Childs, 2003). Advergimes are advertisements in a unique form, and current data will

help monitor if gender stereotypes are increasing or decreasing. This study found more female main characters in advergimes than male ones. This is an interesting finding as most television commercials feature males as the main character even in gender-neutral commercials. In this study that was not the case, the opposite was found with females overrepresented. Another significant discovery was the decrease of male main characters and the increase of man-made characters (46) in male specific advergimes. Most of the man-made characters in boy-only advergimes were vehicles.

For target gender, girl-only games accounted for over half of the advergimes, while boy-only games equaled to a lesser amount. So, this current study is in line with previous gender research findings that show a trend in favor of females, who for a long time have been underrepresented. Larson (2001) found the female to male ratio in TV commercials improving, and Maher & Childs (2003) also reported almost equal amount of gender specific ads targeting boys and girls. Kahlenberg and Hein (2010) also recorded a higher number of ads targeted at females than males, and this study falls in line with those findings, in which females are finally being depicted equally in advertisements.

However, not much in gender stereotype literature has changed in terms of content. Even though advertisers are now moving from TV to Internet, from commercials to advergimes, this study found that gender stereotypes are still common in ads. The results confirmed that traditional stereotypes are found even in newer media, and that girls are still being targeted with the thin body ideal. Appearance activities such as makeovers, fashion shows, and hair treatments were common themes for girl-only games, which can put pressure on young girls to focus on their looks at an early age.

Traditional media mostly features thin and attractive female characters, which can unintentionally give young girls an unrealistic standard to achieve. In addition, girls may want to model after their favorite brand/ character by dressing like the female characters. Many female characters wore outfits that accentuated the female form and curves. This research confirms that a high amount of main characters were shown in tight or revealing clothes, which depicts women as sensual or objects, also found in previous literature (Zurbriggen et al., 2010). Female characters were most often portrayed doing passive activities like standing in a dressing room or sitting on the counter of a kitchen. These common gender stereotypes focus on the beauty of a woman's appearance, but not on her intellect or possible contributions to society. Gender research generally shows women in passive roles, and this study confirms that this is still a common stereotype found even in new forms of advertising (Hurst & Brown, 2008). When advergames did show females in activity, although a small percentage, it was usually contrary to gender stereotypes such as Barbie surfer or Polly Pocket skydiver. This could be evidence that advertisers are experimenting with new ideas that eliminate showing females as passive and encourage views of them as active. This positive trend however is not mirrored in advergames targeted at males.

Research results revealed that male gender stereotypes are not changing. Boy-only games featured high percentages in gender role portrayals associating with danger and adventure. A majority of the male games were centered on war or racing. The game focus for males seems linked with aggression and violent acts. Violence and aggression in child advertising is not a new topic; for instance, Larson (2001) also reported violence in commercials and it is rarely featured in girl-only commercials. As cited in the

literature review, Youth Violence Report of the U.S. Surgeon General research states that watching violence can potential lead to aggressive acts. Male-only advergmes commonly featured violence, aggression, and weapons in advergmes. Once again returning to the principles of social learning theory, and the potential for children to imitate unfavorable behavior from advergmes.

This study may also show the beginning of new stereotypes developing with high percentages of pastel colors for females and neutral khaki colors that resemble military colors related to war for males. Each color scheme was primarily used to target only one specific gender. Advertisers may be purposely staying away from the stereotypical pink and blue for gender in advergmes, yet they still reinforce gender stereotypes with color associations by excluding certain colors schemes for the opposite gender.

Research results show that gender-neutral ads are underutilized in advergmes. Gender-neutral advergmes were featured for products such as card games or board games, yet more than just these products can be advertised to both genders. As Bakir et al. (2008) mentioned, advertisements do not have to be sex-specific, but common themes can attract the attention of both genders as well. The toy industry would benefit from gender-neutral advertisements and would potentially sell more products. Ultimately, advergmes show little progress in removing gender stereotypes. It is positive that females are being featured more often, but it is unconstructive to feature traditional gender roles and stereotypes in such a new form of advertising.

Limitations and Suggestions for Further Research

This study features some limitations. The advergimes selected were representative of only two companies within one industry and cannot be generalized to all advergimes on the Internet. Because this is a relatively new way to advertise online, it is difficult to say that all advergimes have or will have the same structure. In general, the toy industry is known for featuring gender stereotypes in advertising, and could have impacted analyzed results to appear more significant than they really are. In addition, repetition of brands and characters may have skewed the results since companies usually use the same character or game style to advertise a multitude of products. Since this study was based solely on content analysis, the targeted age range projected for the advergimes could be flawed. The age information was taken from product information on the manufacturer website, but it may not give an accurate depiction of who will actually play advergimes. It also must be taken into consideration that there was only one coder recording all data, and even though this study did perform pretests and intercoder reliability, it is plausible that the coder performed coder bias or error.

There are several areas for exploration and future research. This study has set a foundation for future research on gender stereotypes and if they affect children as a target audience. The body of knowledge would benefit from a study on gender stereotypes in advergimes and if they influence children's patterns of thought and action. Another direction for research is studying the relationship between age and gender stereotype knowledge, to see if children notice gender stereotypes in advergimes. Few studies have been conducted on parents and children who play advergimes. Nairn (2008) examined child consumer activity online with parents and kids, but not advergimes specifically.

Content analysis coupled with in-depth interviews can be examined to see if parent involvement and education can minimize potential impact of gender stereotypes on children. Gender stereotypes can be examined in other industries that use advergames as advertising tools such as the food industry.

Chapter VI: Conclusion

This gender stereotype research is part of a larger body of knowledge that focuses on advertising and the effects it has on children. The purpose of this study was to continue the examination as children and advertisers migrate to online platforms. Social learning theory helps explain why children are affected by advertising and how they retrieve, store, and potentially use information from models. The toy industry is now using advergames as a way to advertise to children on their website. Advergames are attractive to children because of their fun appeal. Yet, examining these advergames showed that many of the games promote gender stereotypes, which can stifle children's imagination of what they can become in the future and what part they play in society. One positive element found in advergames is the representation of females. While traditional advertising is slowly seeing improvement in areas such as TV commercials, the online environment is representing both genders. Advertisers need to be aware that the content of advergames is just as important as the product being sold because it has the prospect to impart social lessons and perceptions to children at a young age. Instead of stereotypes, advertisers could use the opportunity to contribute positively to society.

Student Bio

Yvette LeMasters, born and raised in Miami, FL, graduated with high honors in 2006 from the University of Texas at Tyler with her undergraduate degree in Speech Communications. After graduation, Yvette took a break from school to focus on her family and career. In the spring of 2010 she entered the Global Strategic Communications program with Florida International University, and plans to graduate in May 2012. Yvette currently works for the Miami Veterans Administration Healthcare System, which is part of the Department of Veteran Affairs. Upon graduation, Yvette plans to continue her career as a visual information specialist in the non-profit sector.

References

- Alexander, A., Benjamin, L., Hoerner, K., & Roe, D. (1998). We'll be back in a moment: A content analysis of advertisements in children's television in the 1950s. In M. Macklin & L. Carlson. *Advertising to children concept and controversies* (pp. 97-115). Thousand Oaks, CA: Sage.
- Allan, K. & Coltraone, S. (1996). Gender displaying television commercials: A comparative study of television commercials in the 1950s and 1980s. *Sex Roles*, 35(3/4), 185-203.
- Bakir, A., Blodgett, J., & Rose, G. (2008). Children's response to gender-role stereotyped advertisements. *Journal of Advertising Research*, 48(2), 255-266.
- Bakir, A. & Palan, K. M. (2010). How are children's attitudes toward ads and brands affected by gender-related content in advertising? *Journal of Advertising*, 39(1), 35-48.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3, 265-299.
- Baran, S., & Davis, D. (2009). *Mass communication theory: Foundations, ferment and future* (5th ed.). Boston, MA: Wadsworth Cengage Learning.
- Beasley, B. & Standley, T.C. (2002). Shirts vs. skins: Clothing as an indicator of gender role stereotyping in video games. *Mass Communication and Society*, 5(3), 279-293.
doi: 10.1207/S15327825MCS0503_3
- Bertrim, B. (2005). It's how you play the games. *Marketing Magazine*, 110(16), 18.
- Brocato, E. D., Gentile, D., Laczniak, R., Maier, J., & Ji-Song, M. (2010). Television commercial violence potential effects on children. *Journal of Advertising*, 39(4), 95-107.

- Browne, B. A. (1998). Gender stereotypes in advertising on children's television in the 1990s: A cross-national analysis. *Journal of Advertising*, 27(1), 83-96.
- Buijzen, M. & Valkenburg, P. (2003). The unintended effects of television advertising: A parent-child survey. *Communication Research*, 30(5), 483-503.
doi: 10.1177/0093650203256361
- Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, 106(4), 676-713.
- Cai, X. & Zhao, X. (2010). Click here, kids! Online advertising practices on children's websites. *Journal of Children and Media*, 4(2), 135-154.
- Calvert, S. (2008). Children as consumers: Advertising and marketing. *Future of Children*, 18(1), 205-234.
- Chester, J. & Montgomery, K. (2008). No escape: Marketing to kids in the digital age. *Multinational Monitor*, 29(1), 11-16.
- Clarke, J. (2002). The Internet according to kids. *Young Consumers: Insight and Ideas for Responsible Marketers*, 3(2), 45-52.
- Cohan, J. A. (2001). Towards a new paradigm in the ethics of women's advertising. *Journal of Business Ethics*, 33, 323-337.
- Cunningham, S. & Macrae, C. (2011). The colour of gender stereotyping. *British Journal of Psychology*, 102(3), 598-614.
doi: 10.1111/j.2044-8295.2011.02023.x
- Dahl, S., Eagle, L., & Baez, C. (2009). Analyzing advergames: Active diversions or actually deception. An exploratory study of online advergames content. *Young Consumers*, 10(1), 46-59.

doi: 10.1108/17473610910940783

DFC Intelligence. (2011). DFC Intelligence forecasts global advertising in video games to reach \$7.2 billion in 2016. Retrieved from <http://www.dfcint.com/wp/?p=315>

Downs, A. C. & Harrison, S. K. (1985). Embarrassing age spots or just plain ugly? Physical attractiveness stereotyping as an instrument of sexism on American television commercials. *Sex Roles*, 13, (1/2), 9-19.

Eastin, M., Yang, M. S., & Nathanson, A. (2006). Children of the net. *Journal of Broadcasting & Electronic Media*, 50(2), 211-230.

Federal Communications Commission. (n.d.). Children's Internet Protection Act. Retrieved from <http://www.fcc.gov/guides/childrens-internet-protection-act>

Federal Communications Commission. (n.d.). Children's Television Act of 1990. Retrieved from <http://www.fcc.gov/guides/childrens-educational-television>

Federal Trade Commission. (2008). Children's online privacy protection rule of 1998. Retrieved from <http://www.ftc.gov/privacy/coppafaqs.shtm>

Fitzpatrick, M., McPherson, B. (2010). Coloring within the lines: Gender stereotypes in contemporary coloring books. *Sex Roles*, 62, 127-137.
doi: 10.1007/s11199-009-9703-8

Fung, A. & Ma, E. (2000). Formal vs. informal use of television and sex-role stereotyping in Hong Kong. *Sex Roles*, 42(1/2), 57-81.

Glascok, J., Preston-Schreck, C. (2004). Gender and racial stereotypes in daily newspaper comics: A time-honored tradition? *Sex Roles*, 51(7/8), 423-431.

Goldberg, M. & Gorn, G. (1978). Some unintended consequences of TV advertising to children. *Journal of Consumer Research*, 5(1), 22-29.

- Goldberg, M., Gerald, G., Peracchio, L., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, 13(3), 278-288.
- Gorn, G. & Golberg, M. (1980). Children's responses to repetitive television commercials. *Journal of Consumer Research*, 6(4), 421-424.
- Gorn, G. & Goldberg, M. (1982). Behavioral evidence of the effects of televised food messages on children. *Journal of Consumer Research*, 9(2), 200-205.
- Gunter, B., Oates, C., & Blades, M. (2005). *Advertising to Children on TV: Content, Impact, and Regulation*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Gurau, C. (2008). The Influence of advergames on Players' behaviour: An experimental study. *Electronic Markets*, 18(2), 106-116.
- Harrison, K., & Hefner, V. (2008). Media, body image, and eating disorders. In S. Cavert & B. Wilson, *The handbook of children, media, and development* (pp.381-406). Malden, MA: Blackwell.
- Hastings, G., Stead, M., McDermott, L., Forsyth, A., MacKintosh, A. M., Rayner, M., Godfrey, C., Caraher, M., & Angus, K. (2003). *Review of the research on the effects of food promotion to children: Final report*. Retrieved from <http://www.food.gov.uk/multimedia/pdfs/foodpromotiontochildren1.pdf>
- Holt, D., Ippolito, P. Desrochers, D., & Kelley, C. (2007). Children's exposure to TV advertising in 1977 and 2004: Information for the obesity debate. *Federal Trade Commission*. Retrieved from <http://www.ftc.gov/os/2007/06/cabecolor.pdf>
- Henke, L. (1999). Children, advertising, and the Internet: An exploratory study. In *Advertising and the World Wide Web* (5). Retrieved from: Ebsco Host Database
- Hoerrner, K. (1996). Gender roles in Disney films: Analyzing behaviors from snow white

to simba. *Women in Studies in Communication*, 19(2), 213-228.

Howden, L. & Meyer, J. (2011, May). Age and Sex Composition: 2010. In *2010 Census Briefs*. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf>

Hull, D. B., Hull, J. H., & Knopp, C. (2011). The impact of color on ratings of “girl” and “boy” toys. *North American Journal of Psychology*, 13.3, 549. Retrieved from [http://go.galegroup.com.ezproxy.fiu.edu/ps/i.do?id=GALE%7CA2](http://go.galegroup.com.ezproxy.fiu.edu/ps/i.do?id=GALE%7CA276353296&v=2.1&u=flstuniv&it=r&p=HRC&sw=w)

[76353296&v=2.1&u=flstuniv&it=r&p=HRC&sw=w](http://go.galegroup.com.ezproxy.fiu.edu/ps/i.do?id=GALE%7CA276353296&v=2.1&u=flstuniv&it=r&p=HRC&sw=w)

Hurtz, W. & Durkin, K. (2004). The effects of gender-stereotypes radio commercials. *Journal of Applied Social Psychology*, 34(9), 1974-1992.

Hust, S., & Brown, J. (2008). Gender, media use, and effects. In S. Cavert & B. Wilson, *The Handbook of children, media, and development* (pp.98-120). Malden, MA: Blackwell.

Kahlenberg, S., & Hein, M. (2010). Progression on Nickeloden? Gender-role stereotypes in toy commercials. *Sex Roles*, 62, 830-847.

doi: 10.1007/s11199-009-9653-1

Kunkel, D. & Castonguay, J. (2012). Children and advertising. In D. Singer & J. Singer (Ed. 2), *Handbook of children and the media* (pp. 395-418). Thousand Oaks, CA: Sage.

Kretchmer, S. (2004). Advertainment: The evolution of product placement as a mass media marketing strategy. *Journal of Promotion Management*, 10(1), 37-54.

Landes, D. (2009). Toys ”R” Us scolded for gender discrimination. *The Local*. Retrieved from <http://www.thelocal.se/22504/20091006/>

Larson, M. S. (2001). Interactions, activities, and gender in children’s television

- commercials: A content analysis. *Journal of Broadcasting & Electronic Media*, 45(1), 41-56.
- MacArthur, K. (2001). Compression quandary. *Advertising Age*, 42(7), S14. Retrieved from Ebscohost
- Maher, J. & Childs, N. (2003). A longitudinal content analysis of gender roles in children's television advertisements: A 27 year review. *Journal of Current Issues and Research in Advertising*, 25(1), 71-81.
- Martin, C. & Ruble, D. (2004). Children's search for gender cues: Cognitive perspectives on gender development. *Current Directions in Psychological Science*, 13(2), 67-70.
- Martin, M., Gentry, J., & Hill, R. (1999). The beauty myth and the persuasiveness of advertising. In M. Macklin & L. Carlson. *Advertising to children concept and controversies* (pp. 165-187). Thousand Oaks, CA: Sage.
- McDermott, L., O'Sullivan, T., Stead, M., & Hastings, G. (2006). International food advertising, pester power and its effects. *International Journal of Advertising*, 25(4), 513-539.
- McDonough, P. (2009, October). TV viewing among kids at an eight-year high. *Nielsen Wire*. Retrieved from http://blog.nielsen.com/nielsenwire/media_entertainment/tv-viewing-among-kids-at-an-eight-year-high/
- McNeal, J. (1992). *Kids as Customers*. New York, NY: Lexington Books.
- McNeal, J. (1999). *The Kids Market Myths and Realities*. Ithaca, NY: Paramount Market.
- Miller, M. & Summers, A. (2007). Gender differences in video game characters' roles, appearances, and attire as portrayed in video game magazines. *Sex Roles*, 57, 733-742. doi: 10.1007/s11199-007-9307-0

- Montgomery, K. C. (2000). Children's media culture in the new millennium: Mapping the digital landscape. *The Future of Children*, 10(2), 145-167.
- Montgomery, K. C. (2012). Safeguards for youth in the digital marketing ecosystem. In D. Singer & J. Singer (Ed. 2), *Handbook of children and the media* (pp.631-648). Thousand Oaks, CA: Sage.
- Moore, E. S. (2004). Children and the changing world of advertising. *Journal of Business Ethics*, 52, 161-167.
- Moore, E.S. (2006). It's child's play: Advergaming and the online marketing of food to children. *Kaiser Family Foundation*, 7536, 1-57. Retrieved from <http://www.kff.org/entmedia/upload/7536.pdf>
- Nairn, A. (2008). "It does my head in... buy it, buy it, buy it!" The commercialization of UK children's websites. *Young Consumers*, 9(4), 239-253.
doi: 10.1108/17473610810920461
- Nairn, A. & Dew, A. (2007). Pop-ups, pop-unders, banners and buttons: The ethics of online advertising to primary school children. *Journal of Direct, Data and Digital Marketing Practice*, 9(1), 30-46.
- National Center of Education Statistics. (2005, June). Rates of computer and Internet use by children in nursery school and students in kindergarten through twelfth grade: 2003. In *Issue Brief* (NCES 2005-111). Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005111rev>
- Ogletree, S., Williams, S., Raffeld, P., Mason, B., & Fricke, K. (1990). Female attractiveness and eating disorders: Do children's television commercials play a role? *Sex Roles*, 22(11/12), 791-797.

- Palan, K. (2001). Gender identity in consumer behavior research: A literature review and research agenda. *Academy of Marketing Science Review*, 2001(10), 1-26. Retrieved from <http://www.amsreview.org/articles/palan10-2001.pdf>
- Pike, J. & Jennings, N. (2005). The effects of commercials on children's perceptions of gender appropriate toy use. *Sex Roles*, 52(1/2), 83-91.
doi: 10.1007/s11199-005-1195-6
- Powell, K., & Abels, L. (2002). Sex-role in TV programs aimed at the preschool audience: An analysis of teletubbies and barney & friends, *Women and Language*, 25(1), 14. Retrieved from <http://search.proquest.com/docview/198879860?accountid=10901>
- Pufall, P. B. & Unsworth, R. P. (2004). *Rethinking childhood*. Piscataway, NJ: Rutgers University Press.
- Rideout, V., Foehr, U., & Roberts, D. (2010). Generation M2: Media in the lives of 8-to-18-year-olds. *Kaiser Family Foundation Study*. Retrieved from <http://kff.org>
- Robinson, T., Saphir, M., Kraemer, H., & Varady, A. (2001). Effects of reducing television viewing on children's request for toys: A randomized controlled trial. *Journal of Developmental and Behavioral Pediatrics*, 22(3), 179-184.
- Robinson, T. R., Callister, M., Clark, B. & Phillips, J. (2009). *Web Journal of Mass Communication Research*, 13, 1-18.
- Ruble, D., Balaban, T., & Cooper, J. (1981). Gender constancy and the effects of sex-typed televised toy commercials. *Child Development*, 52(2), 667-673.
- Schor, J. (2004). *Born to buy*. New York, NY: Scribner.
- Shanahan, K., Hermans, C., & Hyman, M. (2003). Violent commercials in television

- programs for children. *Journal of Current Issues and Research in Advertising*, 25(1), 61-69.
- Signorielli, N. (2012). Television's gender-role images and contribution to stereotyping. In D. Singer & J. Singer (Ed. 2), *Handbook of children and the media* (pp. 322-339). Thousand Oaks, CA: Sage.
- Smith, L. (1994). A content analysis of gender differences in children's advertising. *Journal of Broadcasting & Electronic Media*, 38, 323-337.
- Smith, L. J. (1999). Girls' responses to advertisements featuring active, passive, and product-alone visual portrayals. *Academy of Marketing Studies Journal*, 3(1), 33-46.
- Taylor, F. (2003). Content analysis and gender stereotypes in children's books. *Teaching Sociology*, 31, 300-311.
- Thompson, M. & Gray, J. (1995). Development and validation of a new body-image assessment scale. *Journal of Personality Assessment*, 64(2), 258-269.
- Trautner, H. (1992). The development of sex-typing in children: A longitudinal analysis. *German Journal of Psychology*, 16(3), 183-199.
- U.S. Surgeon General. (n.d.) *Youth violence: A report of the Surgeon General*. Retrieved from <http://www.surgeongeneral.gov/library/youthviolence/toc.html>
- Valkenburg, P. M. & Buijzen, M. (2005). Identifying determinants of young children's brand awareness: Television, parents, and peers. *Applied Developmental Psychology*, 26, 456-468.
- Valkenburg, P. M. & Soeters, K. E. (2001). Children's positive and negative experience with the Internet: An exploratory survey. *Communication Research*, 28(5), 652-675.
doi: 10.1177/009365001028005004

- Van Reijmersdal, E., Rozendaal, E., & Buijzen, M. (2011). Effects of prominence, involvement, and persuasion knowledge on children's cognitive and affective responses to advergames. *Journal of Interactive Marketing*.
doi: 10.1016/j.intmar.2011.04.005
- Waiguny, M., Terlutter, R., & Zaglia, M. (2011). Influence of advergames on consumers' attitudes and behaviour: An empirical study among young consumers. *International Journal of Entrepreneurial Venturing*, 3(3), 231-247.
- Young, B. (2008). Media and advertising effects. In S. Cavert & B. Wilson, *The Handbook of children, media, and development* (pp.407-431). Malden, MA: Blackwell.
- Zurbriggen, E., Collins, R., Lamb, S., Roberts, T., Tolman, D., Ward, L., & Blake, J. (2010). Report of the APA task force on the sexualization of girls. *American Psychological Association*. Retrieved from <http://www.apa.org/pi/women/programs/girls/report-full.pdf>

