Got Game?
An Investigation of Parents’ Understanding of and Attitudes Toward Advergaming

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At 78%, online gaming is by far the number one activity of children ages six to eleven who went online in the past 30 days (Mediamark Research & Intelligence (MRI) 2007). With an average of eleven hours a week, representing a 63% increase from 2004, children are spending more time online than ever (Nielsen 2009). Forty percent of children ages six to eleven, approximately 10.7 million, visited a website they heard or saw following exposure to a commercial or advertisement (MRI 2008). Emarketer.com estimates in 2011 that more than 20 million children ages 11 and under will be online and reach 24 million by 2014 (Emarketer.com, 2010).

One particular form of online gaming, advergames, blends gaming dynamics with a commercial message. These games are a type of branded entertainment that feature advertising messages, logos, and trade characters in a game format typically found online (Moore, 2006) often on an advertiser’s website. Three dominant issues have risen regarding advergames targeting children. This blending of game with commercial theme, or blurring of advertising with entertainment content, has drawn concern from a variety of groups as they question children’s ability to discern that the advergame is a form of advertisement, even for children ages seven to eleven (Moore 2006, Quilliam 2009, Story and French 2004). Additionally, Chung and Grimes (2005) note the privacy concerns resulting from the data mining potential when children engage in online game play coupled with parents’ unawareness that web sites collect users’ information without their knowledge (Turow 2001).

To date, limited research has attempted to understand parental perceptions of and attitudes toward Internet advertising directed at children. Bakir and Vitell (2009) specifically call
for research that investigates “parental awareness of advergames targeting children (p. 307).”

This research seeks to address this gap and addresses the following questions:

RQ1: Do parents of children ages seven to eleven understand what advergaming is?

RQ2: As reported by parents:
   a) what percent of children ages seven to eleven have played advergames in the past 30 days?
   b) what games do they report their child as playing?

RQ3: What are parents’ attitudes toward advergaming directed to children?

RQ4: How might parents’ understanding of and attitudes toward advergaming relate to their experience with advergaming as assessed by:
   a) whether or not their child has played advergames?
   b) whether or not they have played advergames with their child?

**METHOD**

As part of a larger study, three phases of research were conducted. The first two phases, qualitative interviews with six parents of children seven to eleven and quantitative pretesting with twenty different parents, were exploratory in nature to determine parents’ understanding of the advergaming concept, their awareness of their children’s exposure to advergaming, and finalize an operational definition of advergaming. The results from these initial phases provided guidance for the development of the online survey.

Insights from the qualitative interviews revealed that most parents were unaware of the term “advergaming” and its meaning. When asked what they thought advergaming was, the participants’ responses were quite literal as most interpreted advergaming as a strict combination of advertising and gaming. After exposure to an advergaming example and definition (based on Moore 2006; Dahl et al. 2008), participants were asked what they thought about advergaming and children. Parents indicated it was a satisfactory definition and would not change anything.
The second phase involved a quantitative pretesting of this definition with another parent sample. A PowerPoint slideshow was created depicting six screen shots of websites containing child-themed material and arranged randomly in order to prevent response bias. Two of the six web captures represented advergames while the remaining four web captures did not. The presentation order of the two advergame website captures were determined by a roll of a die to create 20 unique versions of the slideshow. Parents were presented with the definition of an advergame developed from the individual interviews, watched the PowerPoint presentation of the six web captures and indicated whether or not it qualified as an advergame.

There were a total of 40 possible correct advergame identifications among the entire pre-test sample (two advergames in each slideshow for each of the 20 participants). Nineteen of the 20 participants correctly identified both advergames in each of their slideshows. In total, there were 39 correct identifications of advergames out of a possible 40 (97.5%). On the surface it appears that this percentage agreement supports the operational definition of advergaming. Further inspection of the responses indicated some confusion on what qualified as an advergame. One of the slides, for Hasbro.com, was incorrectly identified as an advergame by 75% of the parents. Although the site depicts games one can buy, there are no games to play on the site per se. Thus, for the online survey, the solution was to provide the definition and the two clear examples of advergames in an effort to ensure parental understanding.

**Online Survey Administration and Sample**

A self-administered online survey was given to a diverse sample of 214 parents of children aged seven to 11 via E-Rewards.com, an online opinion panel. Respondents were asked to complete the advergaming component of the survey with respect to their child between the ages of seven and eleven who had the closest upcoming birthday. Attitudes toward advergaming
consisted of 15 questions adapted from prior studies to be applicable to advergaming and assessed agreement via a 5-point Likert scale format (1= strongly disagree to 5= strongly agree).

Demographic characteristics for children revealed that there were 114 males (53.3%) and 100 females (46.7%). Based on age, 16.4% were seven years old, 19.2% were eight years old, 26.2% were nine years old, 22.9% were 10 years old, and 15.4% were 11 years old. Of the 214 respondents, 61 (28.5%) parents indicated their child had played an advergame in the past 30 days and 153 (71.5%) parents said their child had not played or did not know.

**SELECTED RESULTS**

**RQ1 & RQ2: Parents’ Understanding of Advergames & Child’s Advergame Play**

Of the 61 parents who indicated that their child had played an advergame in the past month, 45 parents provided one or more names/descriptors. Of these 45 parents, 27 (60%) correctly reported an advergame, primarily in the area of a children’s program/commercial character. Thirty-seven (60.7%) said they were directed to the advergames following exposure to some type of advertising. Fifteen (40.5%) reported their child played the advergame following web ad exposure, 16 (43.2%) following exposure to a TV ad, two (5.4%) following exposure to a magazine ad and two (5.4%) reported advergame play following exposure to an unspecified form of advertising. Twenty-one (77.8%) of the 27 parents who correctly identified an advergame reported their children being directed to an advergame following exposure to some form of advertising. Seven of the 21 (33.3%) were prompted by web ads, seven (33.3%) of the 21 were prompted by TV ads and only one (4.8%) was prompted by a magazine ad.
RQ3: Profile of Parents’ Attitudes

Though only 61 parents out of the original sample reported their child played an advergame in the past month, 88 of the 214 parents (41%) agreed or strongly agreed that their child enjoyed playing advergames.

RQ4a: Differences Based on Whether the Child Played Advergames.

In order to address RQ4a, independent samples t-tests were performed to compare the means for the attitude questions. The analysis revealed seven significant differences between those parents whose child had played advergames within the past 30 days (n=61) versus those who had not (n=153) as shown in Table 3.

Table 3
Significant Differences in Attitudes Toward Advergaming:
Parents of Children Who Played in Past 30 Days vs. Those Who Did Not

<table>
<thead>
<tr>
<th>Question</th>
<th>Original Sample N=214</th>
<th>Child Played n=61</th>
<th>Child Didn’t Play n=153</th>
<th>t-value (Played v. Didn’t Play)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most advergames for children are okay for them to play by themselves.</td>
<td>2.97</td>
<td>2.57</td>
<td>3.12</td>
<td>-3.785</td>
<td>.000***</td>
</tr>
<tr>
<td>Advergames allow children to enjoy a world of fantasy.</td>
<td>3.30</td>
<td>3.64</td>
<td>3.16</td>
<td>3.630</td>
<td>.000***</td>
</tr>
<tr>
<td>Advergames take undue advantage of children</td>
<td>3.13</td>
<td>2.84</td>
<td>3.24</td>
<td>-2.652</td>
<td>.009***</td>
</tr>
<tr>
<td>Advergames lead children to make unreasonable purchase demands on their parents</td>
<td>3.13</td>
<td>2.90</td>
<td>3.22</td>
<td>-1.952</td>
<td>.050**</td>
</tr>
<tr>
<td>Advergames directed at children lead to family conflict</td>
<td>2.56</td>
<td>2.28</td>
<td>2.67</td>
<td>-2.677</td>
<td>.008***</td>
</tr>
<tr>
<td>There’s nothing wrong with advergames sponsored by toy manufacturers.</td>
<td>3.08</td>
<td>2.87</td>
<td>3.17</td>
<td>-2.131</td>
<td>.034**</td>
</tr>
<tr>
<td>There’s nothing wrong with advergames for children sponsored by food manufacturers.</td>
<td>3.14</td>
<td>2.84</td>
<td>3.27</td>
<td>-3.059</td>
<td>.003***</td>
</tr>
</tbody>
</table>

*Mean on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree)
** Significant at .05
***Significant at .01
RQ4b: Differences Based on Whether the Parent Played With the Child

In order to address RQ4b, independent sample t-tests were conducted to test for differences between parents that played advergames with their children (n=20) and parents that have not played advergames with their children (n=40) (See Table 4). Parents who had played an advergame with their child disagreed more that advergames make children want things they really don’t need; that there’s nothing wrong with advergames sponsored by toy manufacturers; and they agreed more that they talked to their child about the advergames he or she plays.

Table 4
Attitudes Toward Advergaming:
Parents Who Played Advergames with Their Children vs. Those Who Did Not
(Among Parents Who Reported Their Child Played Advergames in the Past 30 Days)

<table>
<thead>
<tr>
<th>Question</th>
<th>Parent Played n=21</th>
<th>Parent Didn’t Play n=40</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advergames make children want things they don’t really need.</td>
<td>2.86</td>
<td>3.48</td>
<td>-2.040</td>
<td>.046**</td>
</tr>
<tr>
<td>There’s nothing wrong with advergames sponsored by toy manufacturers.</td>
<td>2.52</td>
<td>3.05</td>
<td>-2.097</td>
<td>.040**</td>
</tr>
<tr>
<td>My child and I talk about the advergames s/he plays.</td>
<td>3.86</td>
<td>3.05</td>
<td>2.865</td>
<td>.006***</td>
</tr>
</tbody>
</table>

*Mean on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree)
** Significant at .05
*** Significant at .01

References available upon request.