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Emerald Article: Marketing toys without playing around

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Marketing toys without playing around

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Abstract

Purpose – *The purpose of this paper is to gain insight into how both characteristics of toys and marketer-provided cues influence parents' perceptions of advertised toys and their ideas of what life skills are important for their children's future well-being and success.*

Design/methodology/approach – *Data were collected with a 2 (toy encourages structured play vs toy encourages unstructured play) × 2 (ad mentions "brain development" vs ad mentions "child development") experimental design involving four advertisements for a hypothetical toy.*

Findings – *Parents recognized that the toy encouraging unstructured play has many benefits. Relative to parents who saw an ad with a "child development" appeal, those who saw an ad with a "brain development" appeal rated social and intellectual development as less important for their children.*

Practical implications – *Findings support the idea that manufacturers can and should continue to develop toys, which encourage relatively unstructured play; such toys are both appreciated by parents and valued by experts. They also support eliminating "brain talk" from advertising; such messages do not enhance parents' evaluations of toys and detract from parents' maintaining the value they place on social and intellectual development.*

Social implications – *By designing toys which encourage play which is most beneficial to children and promoting them with advertisements without "brain" language, marketers can support children's development and parents' values.*

Originality/value – *This paper provides insights into the effects of toy and ad characteristics on parents' perceptions of toys and what is important for their children.*

Keywords *Toys, Marketing, Values, Children (age groups), Parents, Advertising, Play, Transformative research, Social responsibility, Behaviour*

Paper type *Research paper*

Introduction

Responsible marketing means concern for products and promotions directed to parents who buy for children (e.g. Ogba and Johnson, 2010). Much research on the effects of marketing products targeted to children has emphasized avoiding harm. For example, Hogan (2007) discusses the efforts of the toy industry to become more responsible, open, and trustworthy. This research complements that approach by investigating ways toy marketers can develop and promote toys in ways that support parental values and enhance child development.

The potential for toy marketers to help parents and children is especially promising because childhood is a prime time to nurture development (e.g. Hirsh-Pasek *et al.*, 2009). Research has found that learning is cumulative: competencies acquired by young children help them when they are older (Hirsh-Pasek and Golinkoff, 2011). Play is an important means of both learning and psychological development for young children (Hirsh-Pasek *et al.*, 2009; Myck-Wayne, 2010; Ozanne and Ozanne, 2011) and developmental psychologists can

provide marketers with guidelines for creating and promoting toys which are most likely to lead to the kinds of play that help children the most.

In general, psychologists have found that play which is relatively unstructured, in the sense that it is open-ended and encourages children to find their own ways to solve problems, is more likely to promote learning than that which is relatively structured, in the sense of encouraging children to find a single correct answer. Fisher *et al.* (2008) showed 99 child development experts a list of 26 children's activities and asked them to rate each activity's relation to academic learning. The experts reported that the activities involving relatively unstructured play were more likely to lead to learning than those involving more structured play. Marketers can help children learn by developing and promoting toys which are consistent with the experts' recommendations for less structured play.

In addition, there is concern about marketing messages and how they influence purchases (e.g. Jain *et al.*, 2011) and consumer values. Research has shown that the presence of an attribute in an advertisement can make that attribute salient in consumer decision making (Gardner, 1983) by increasing the amount of attention directed to the attribute (Mackenzie, 1986), but it is not clear how ad content may interact with parental "hot buttons". How does the presence of a trait in an advertisement affect the traits that parents value for their children's well-being and success?

The general purpose of this research is to understand how both the characteristics of toys and marketer-provided cues influence:

- Parents' perceptions of advertised toys.
- Parents' ideas of what life skills are important for their children's future well-being and success.

These issues are of particular concern because the marketplace targets parents of young children with expensive electronic toys, books, computer games and videos with claims that such toys will facilitate brain development and help children become smarter but, there is no evidence of any positive educational effects (Hirsh-Pasek and Golinkoff, 2008). In fact, evidence suggests product use may be harmful or may result in children not having time for activities that are developmentally appropriate (Kaiser Foundation Report, 2005). While families are turning away from traditional toys (books, blocks, and dolls) in favor of electronic toys, believing that the modern toys will improve their children's abilities, child development experts are emphasizing the exact opposite – there is nothing better for child development than traditional play (Marcus, 1999).

The paper begins with a review of the literature and then describes an experiment to see how a description of a hypothetical toys and a marketer-provided message affect parent's perceptions of the advertised toy and their ideas about the skills which are important for their children's future. Findings are presented and implications for marketers, society, and future research are discussed.

Literature review

Effects of toys on children

When parents choose toys, one of the factors they consider is whether they will help their child develop intellectually or creatively. Parsons and Ballantine (2008) asked parents to identify the single most important consideration when purchasing a gift for a child, and 15.2 percent felt the most important consideration was that it be educational or foster the child's development or creativity. Parents and developmental psychologists do not have exactly the same ideas about the kinds of play that will foster this development. Fisher *et al.* (2008) compared the perceptions of parents and developmental psychologists for different kinds of play. They found that parents realize that play which is relatively unstructured – i.e. unfettered, open-ended play which allows children to find multiple ways to do things – helps their children learn, and developmental psychologists agree. Where parents and experts disagree, is in the role of highly structured play, which typically involves getting the

right answer and does not allow opportunities for exploration. Parents see such play as more educational and beneficial than experts do.

One factor which affects whether play will be relatively structured or unstructured is the nature of the toy itself. Bergen *et al.* (2010) found that toy features contribute to the developmental level of parent-child play with the toy and the types of play actions that occur. Some toy features were used in exploration, practice play, and social games; some were related to the child laughing, and some played a role in the nature of parent-child interactions and were related to the parent and child's focus of attention. Children learn from their experiences with toys – both when they play alone and when they play with toys with others – and this learning is enhanced by relatively unstructured play which encourages children to think creatively and come up with their own problems and solutions. In contrast, the experiences children have with toys which have all the answers, and so lead to highly structured play, typically direct the child to the “right answer” and do not provide such opportunities for discovery. The play literature suggests that developmental psychologists will perceive toys that encourage unstructured play as having positive characteristics, but it is not clear how mothers, who sometimes feel structured play is more educational (Fisher *et al.*, 2008), will perceive such toys. Accordingly, we will investigate perceptions of toys which encourage structured vs unstructured play, but will not formulate a hypothesis about which toys will be perceived as having more positive characteristics.

Effects of advertising messages

The role of marketing messages aimed at parents is an important and under-studied aspect of toy marketing. Developmental psychologists are particularly concerned about appeals that use the word “brain” because people react so strongly to anything that has to do with “brain”. According to Hirsh-Pasek and Bruer (2007),

Brain-based consultants continue to visit school districts. And a market has grown for brain-based toys. The message of synaptic growth and critical periods has affective appeal, but no scientific substance.

They report that brain research, although it is currently unable to address issues directly related to how children learn, receives a disproportionate amount of attention from policy-makers. Weisberg *et al.* (2008) found that people recognized that bad explanations of psychological phenomenon were inferior to good explanations, but when the bad explanations had irrelevant neuroscience jargon thrown in, they were willing to overlook flaws in the bad explanations. Similarly, toys advertised with “brain” claims may be perceived as having positive characteristics (hypothesis 1).

In addition, Bloom (2006) points out that any mention of “brain” in a wide variety of media attracts attention and enthusiasm. While marketers often want to get people to notice their ads in a crowded media environment, “brain” messages may be somewhat misleading in the context of toys. Typically salient ad attributes are considered important in product evaluation (Gardner, 1983) as they attract attention (Mackenzie, 1986). If parents see “brain” mentioned in ads for toys, they may begin to consider it an important attribute in toys and consider other attributes less important (hypothesis 2).

Given the importance of the type of play toys encourage (structured vs unstructured) and the importance of advertising messages (brain appeal vs non-brain appeal), manufacturers need to know the kinds of toys to develop and the best ways to advertise them.

Method

To investigate the role of toy characteristics which encourage relatively structured play vs relatively unstructured play and the role of marketing messages which involve a brain development appeal vs a child development appeal, we used a 2 (toy) × 2 (appeal) design involving four advertisement for a hypothetical toy.

The first factor, Toy, was manipulated by describing the hypothetical toy as either having characteristics associated with unstructured play or structured play. Although structured vs

unstructured play is only one of the factors parents consider when selecting toys, by abstracting this one variable, we are able to better understand its impact. In addition, although structured vs unstructured play can be viewed along a continuum involving different degrees and types of structure, to gain insight into this factor, we chose to look at exemplars that are close to the extremes and will refer to them as “unstructured” and “structured” for simplicity. Recall that unstructured play typically involves letting children know that there are multiple approaches to a situation and provides them with opportunities for experimentation, while structured play typically involves directing children to find one “right” answer and does not provide opportunities for experimentation. To create descriptions of a toy that is likely to lead to structured play and one that is likely to lead to unstructured play, we used “the psychologists’ six toy-buying principles” (Hirsh-Pasek and Golinkoff, 2007):

1. Look for a toy that is 10 per cent toy and 90 per cent child. A lot of toys direct the play activity by talking to children or asking them to press buttons. Find a toy that does not command the child.
2. Toys are meant to be platforms for play – they should be props not directing play.
3. If it is a toy that asks your child to supply one thing – such as fill in the blank or give one right answer – it is not allowing the child to express creativity.
4. Look for something that can be taken apart and remade – to build imagination.
5. See if the toy promises brain growth. If it is telling you that your child is going to be smarter or bilingual it is a red flag.
6. Does the toy encourage social interaction? It is fine for your child to have alone time, but it is great for them to be with others.

The first four of the “the psychologists’ six toy-buying principles” involve characteristics of toys themselves, and were used to design the hypothetical descriptions of the toys used in our study. Our description of a hypothetical toy, which would encourage unstructured play was written to be consistent with the first four of the above characteristics. More specifically, the unstructured play toy was described as:

Colorful components encourage your child’s learning by allowing any number of possible fun compositions. Will engage your child for hours. Pieces can be taken apart and remade as many times and ways as your child wants.

In contrast, the hypothetical toy which would encourage structured play was written to be inconsistent with the first four of the “the psychologists’ six toy-buying principles”. More specifically, the structured-play toy was described as:

Colorful components encourage your child’s learning by playing a fun song when the right answer is selected. Will engage your child for hours. All in one assembly so pieces don’t get all over your house or get lost.

The fifth of “the psychologists’ six toy-buying principles” involves marketer-provided messages about the toy, rather than characteristics of the toy itself. To understand the role of such language on parents’ perceptions of advertised toys and the impact of such messages, we investigated the content of the marketing message independently of toy characteristics. The second factor, “ad appeal” was manipulated by a statement in the ad which said that the toy was developed by a specialist in “brain development” or “child development”. Note that this is a conservative test of the effects of “brain” messages because a child development specialist would be expected to also know about brain development.

The 2 (toy) × 2 (ad appeal) design gave us four advertisements for hypothetical toys. The ads were presented as mockups so parents did not expect professional quality and did not have many aspects typically found in ads. Our purpose was to isolate the effects of the message components that were of interest to us. For example, to avoid parents making inferences about the toy from a picture, the ads did not have an illustration. Instead parents

were told that the ads do not yet have pictures and that there was a space in the ad indicating where a picture would go.

The study was completed by 236 English-speaking female parents/guardians with at least one child under the age of ten. Female parents and guardians were used because according to Anita Frazier, NPD Funworld entertainment industry analyst, women buy more toys for children than men (NPD Group, 2005). Each participant was paid 50 cents and completed the study online on her own. They were recruited through Amazon Mechanical Turk (AMT). AMT is an online marketplace where people can use an online interface (www.mturk.com) to post tasks for completion for a fee. Participation is double blind, but researchers can require that respondents meet specific criteria and retain the ability to accept or reject each participant's responses if they fail to meet the criteria before Amazon sends payment to the participant. AMT has been found to be a good way to get data with good validity, and has been used in a variety of disciplines. For example, Heer and Bostock (2010), studying visualization, found that studies run with AMT successfully replicated findings of previous studies of luminance contrast and spatial encoding and Gardner *et al.* (2012), studying self-assessments of body size estimation and dissatisfaction found that AMT replicated findings of previous studies and concluded that it was an effective tool for data collection on attitudinal and perceptual aspects of body image and dissatisfaction. Sprouse (2011) compared measures from laboratory studies to those obtained from AMT and found they were very similar. Buhrmester *et al.* (2011) found that "(a) MTurk participants are slightly more demographically diverse than are standard Internet samples and are significantly more diverse than typical American college samples; (b) participation is affected by compensation rate and task length, but participants can still be recruited rapidly and inexpensively; (c) realistic compensation rates do not affect data quality; and (d) the data obtained are at least as reliable as those obtained via traditional methods."

Participants were told:

This study involves asking you to look at mock up for an ad for a toy you might consider giving to a four year old. The ad is very rough and does not yet have a picture, but the place for the picture is indicated. Your evaluation of the toy and its suitability for giving as a gift would depend on a number of factors. For the sake of this experiment, please assume that you have decided to spend \$19.99 on the gift and that the advertised product sells for \$19.99. Please also assume that the recipient does not have this particular toy and that getting it wrapped and to the child is not a problem.

Participants saw one of the four ads and responded to items to assess perceptions of the advertised toy using a 1 (disagree) to 7 (agree) scale. In addition, they were asked to rate the importance of skills as contributors toward their children's development and future well-being and success on a scale from relatively unimportant (1) to relatively important (7). Upon completion of the study, demographics were assessed, the parents read a debriefing statement, and the fact that the research should not be viewed as a recommendation of particular products was emphasized.

Findings

Perceptions of the advertised toy

As can be seen in Table I, relative to the Structured Play Toy, the Unstructured Play Toy was considered:

1. A good gift:

- For a child who tends to play with others ($p = 0.016$, Unstructured Play toy = 4.513, Structured Play Toy = 4.045).
- For a family where they have time to use the product with the child ($p = 0.001$, Unstructured Play Toy = 5.113, Structured Play Toy = 4.496).
- For a child who is creative ($p = 0.00$, Unstructured Play Toy = 5.651, Structured Play Toy = 4.2).

Table I Perceptions of the advertised toy by toy type

<i>Characteristics</i>	<i>p-value</i>	<i>Unstructured play toy</i>	<i>Structured play toy</i>
This product would be a good gift for a child who tends to play with other	0.016	4.513	4.045
This product would be a good gift for a family where they have time to use the product with the child	0.001	5.113	4.496
This product would be a good gift for a child who is creative	0.00	5.651	4.2
This product would be a good gift for a family where they stress creativity	0.00	5.632	4.512
This product would be a really fun gift for adults to use with the child	0.002	4.909	4.299
This product would help the child develop creativity	0.00	5.53	4.478
This product would help the child develop physically	0.005	3.962	3.364
This product would help the child develop socially	0.003	4.272	3.664
I would buy something like this for my child	0.033	5.145	4.676

Notes: Perceptions were measured on a scale of 1 signifying disagree to 7 signifying agree

- For a family where they stress creativity ($p = 0.00$, Unstructured Play Toy = 5.632, Structured Play Toy = 4.512).
- A really fun gift for adults to use with the child ($p = 0.002$, Unstructured Play Toy = 4.909, Structured Play Toy = 4.299).

2. Something that would help children develop:

- Creativity ($p = 0.00$, Unstructured Play Toy = 5.53, Structured Play Toy = 4.478).
- Physically ($p = 0.005$, Unstructured Play Toy = 3.962, Structured Play Toy = 3.364).
- Socially ($p = 0.003$, Unstructured Play Toy = 4.272, Structured Play Toy = 3.664).
- Something they'd buy for their own children ($p = 0.033$, Unstructured play Toy = 5.145, Structured Play Toy = 4.676).

Recall that hypothesis 1 hypothesized that toys advertised with “brain” claims were expected to be perceived as having positive characteristics. The only area where the brain development appeal out-performed the child development appeal involved the toy being a good gift for a child they do not know very well, so support for hypothesis 1 was extremely limited. As indicated in Table II, parents who saw the advertisement with the brain development appeal thought the toy would be a better gift for a child they did not know well than those who saw the advertisement with a child development appeal ($M = 4.80$ vs $M = 4.29$, $p = 0.01$).

The effect can be explained by the toy \times appeal interaction ($p = 0.01$). Table III reveals that for the unstructured play toy, parents who saw the brain development appeal thought the toy would be a much better gift for a child they didn't know well than those who saw the child development appeal ($M = 4.97$ vs $M = 3.93$). For the structured play toy, the advertising

Table II Perceptions of the advertised toy by appeal type

<i>Characteristics</i>	<i>p-value</i>	<i>Brain appeal</i>	<i>Child appeal</i>
This product would be a good gift for a child I do not know very well	0.01	4.80	4.29

Notes: Perceptions were measured on a scale of 1 signifying disagree to 7 signifying agree

Table III Toy × appeal interactions for perceptions of advertised toy

<i>Characteristics</i>	<i>p-value</i>	<i>Unstructured brain</i>	<i>Unstructured child</i>	<i>Structured brain</i>	<i>Structured child</i>
This product would be a good gift for a child I do not know very well	0.01	4.97	3.93	4.64	4.66
This product would help the child develop independence	0.05	5.34	5.31	4.97	5.02

Notes: Perceptions were measured on a scale of 1 signifying disagree to 7 signifying agree

appeal did not matter ($M = 4.64$ for brain development appeal vs $M = 4.66$ for child development appeal).

Type of toy and advertising appeal also had an interactive effect on the belief that the toy would help children develop independence ($p = 0.05$). Parents who saw the unstructured play toy advertised with the brain development appeal ($M = 5.34$) and those who saw the structured play toy advertised with the child development appeal ($M = 5.31$) were more likely to think the advertised toy would help the child develop independence than those who saw the unstructured play toy advertised with the child development appeal ($M = 5.02$) or the structured play toy advertised with the brain development appeal ($M = 4.97$).

Factors important for future well-being and success

Parents were asked about the factors important for their child's future well-being and success. As indicated in Table IV, while all parents considered academic skills important, those who saw the ad with the brain development appeal considered academic skills to be less important ($M = 6.24$) than those who saw the child development appeal ($M = 6.52$, $p = 0.03$). Similarly while all parents considered social skills important, those who saw the ad with the brain development appeal considered social skills to be less important ($M = 6.01$) than those who saw the child development appeal ($M = 6.39$, $p = 0.01$). Thus, hypothesis 2, which had hypothesized that mothers exposed to toy ads which contain mention of "brain" would consider braininess an important attribute in toys and consider other attributes less important, received some support (hypothesis 2).

Additional analyses

MANOVA and analysis of covariance was used to see if the above effects differed by parents' level of education, age, number of children, and children's genders, and indicated that parents' demographics did not play a role in their perceptions or post-exposure values.

Discussion

Summary and conclusions

Parents were able to appreciate the advantages of the unstructured play toy, and viewed it as being something they would buy for their own children and something that would help children develop creatively, physically and socially. In addition, relative to the structured play toy, they viewed the unstructured play toy as a really fun gift for adults to use with children and as a better gift across a wide range of circumstances – including as a gift for children

Table IV Factors important for future well-being and success by appeal

<i>Factors</i>	<i>p-value</i>	<i>Brain appeal</i>	<i>Child appeal</i>
Academic skills	0.03	6.24	6.52
Social skills	0.01	6.01	6.39

Notes: Factors were measured on a scale of 1 signifying relatively unimportant to 7 signifying relatively important

who tend to play with others or are creative and for families who have time to use the product with their children or stress creativity. Taken together, these findings suggest that parents, like experts, appreciate the benefits of toys, which promote unstructured play. Consistent with Fisher *et al.* (2008), findings indicate that parents recognize benefits of toys that encourage unstructured play. This is true across education levels, age, number of children, and whether they are parents of boys or girls.

Although the child development appeal was associated with a host of positive perceptions, when the unstructured toy was advertised with the brain development appeal, it was considered a better gift for a child parents do not know well than when it was advertised with a child development appeal ($M = 4.80$ vs $M = 4.29$, $p = 0.01$). Gift giving when the giver does not know the receiver very well involves limited information and social distance. The interplay between characteristics of the toy and characteristics of the message in gift giving is consistent with Larsen and Watson (2001)'s model of the gift giving experience as reflecting economic, functional, social and expressive values, which are themselves, influenced by cost, content and appropriateness.

Perceptions of the toy helping children develop independence were influenced by the interaction of toy type and advertising appeal. The unstructured play toy, which had been considered appropriate for development of social skills and for parent-child play, was considered more likely to lead to independence, when paired with a brain appeal message. The structured play toy had been viewed as less likely to involve social play, and so perhaps more likely to involve solitary play. When paired with a child development message, parents may have inferred that such play might have a benefit – development of independence.

Perhaps most importantly, advertising messages affected what parents considered important for their children. Parents who saw the brain development appeal considered both academic and social skills less important than those who saw the child development appeal. One possible explanation may be that the brain message distracts parents from their own values. Analogous to Weisberg *et al.* (2008)'s finding that irrelevant neuroscience jargon rendered people unable to discern that bad explanations of psychological phenomenon were inferior to good explanations, it seems that adding "brain" to an ad may render parents less able to maintain their beliefs in the importance of academic and social skills for their children's future well-being.

Implications

Findings indicate that on a host of dimensions, parents are a good judge of toys. They also suggest that there is an opportunity for toy companies to capitalize on this and on the consistency of experts with parents' preferences. Marketers can develop toys that are good for children and parents can appreciate toys that inspire unstructured play. This is encouraging because it suggests that parents appreciate toys, which promote unstructured play; consistent with what experts have learned is best for children. This is true across demographics, suggesting that there is an opportunity to develop unstructured toys for children of both sexes, who live in families of a variety of sizes, and have parents of all ages and educational backgrounds.

Although in general, parents agree with experts and recognize the advantages of unstructured toys, the findings suggest opportunities for marketers to develop new product offerings. More specifically findings indicate an opportunity for toy manufacturers to develop new toys for gift giving when the giver and recipient do know each other well. Gift giving is formal, and the structured play toy may be more appealing for gifts giving when there is social distance precisely because it seems more formal than the unstructured play toy-similar to the idea that a gift comes neatly packaged in a box, but when you buy something for yourself it is fine if it comes home in a bag. Toys associated with unstructured play, however, need not be informal in their presentation. There is an opportunity for toy companies to develop gift toys that lead to unstructured play, but have the structure – perhaps in the packaging, messages, or other associations – to make them appropriate for gift giving.

In addition, findings indicate that parents like unstructured toys, but are unsure how to evaluate how well such toys promote independence. There is an opportunity for toy companies to introduce toys designed to help children develop independence that are unstructured, and to promote such toys with messages explaining how they “work” so parents will understand how the lack of structure can facilitate the development of independence. Advertisements and packages for unstructured play toys can describe how they can be used for solo play – perhaps in addition to play with others – and how they can help children learn problem solving techniques associated with the development of independence.

Our findings suggest that marketers can eliminate “brain talk” from advertising because it generally makes toys less attractive to parents. This is encouraging because mentioning “brain” in an advertisement had an unintended, societally detrimental effect on parental values, leading parents to devalue the importance of both academic and social skills. Weisberg (2008) argues that neuroscience can influence the public’s acceptance of material that, perhaps, should not be accepted, and calls upon the scientific community to monitor the way its claims and applications are reported in the popular press. Similarly, our findings suggest that the power of “brain” appeals in advertising means that the advertising community needs to monitor itself to use the word and, by inference, its synonyms, responsibly.

Limitations and future research

The findings provide initial insights into the role of advertising and toy types on parents’ perceptions of advertised toys. Additional research is needed to provide a much more complex and robust evaluation of parents’ judgments of the varied play values of different learning toys. Findings indicate that exposure to advertising affects parents’ values. While the finding is intriguing, this study involved a single and forced exposure. It is not clear how the finding would be affected by multiple exposures under more realistic conditions – i.e. whether greater realism would decrease this effect (because people would be more vigilant to protect their values) or increase it (due to multiple exposures). Further research is also needed to determine whether the findings would hold for ads for familiar products, ads that were richer in content and execution, and ads shown in different media. Additional research is also needed to understand how dimensions of toys other than that of structured vs. unstructured play, such as their degree of technological sophistication, or their similarity to toys mothers owned when they were young, affect parents’ perceptions. Further research is also needed to fully explore the rich range of parents’ evaluations of the play value of different toys that are marketed as educational but vary widely in characteristics, and to assess parents’ willingness to buy such toys at different price points and for different purposes. In addition, research is needed to understand the collective and cumulative impact of marketer-provided messages for a variety of children’s products with a host of advertising appeals related to “brain”, “education”, and “intellect” on societal values and parenting.

While providing initial insights, this research used parents’ self-reports and mock up advertisements for hypothetical toys. Additional research, involving qualitative methods would provide insight into parents’ underlying thinking and studies using behavioral measures would enable us to see whether actions changed as well as responses. For example, would parents exposed to brain appeal messages be less likely to sign their children up for library cards? Research involving real advertisements and real toys would enhance the generalizability of the findings to existing as well as novel products and messages.

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