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Abstract

Due to the increasing prevalence of childhood obesity in society, this study was undertaken to determine if advertisers could potentially be misleading parents through the nutritional claims made in advertisements for popular children's food products. Research was conducted to determine the sorts of nutritional messages parents received from four food advertisements. In total, 41 parents from an Australian university childcare centre participated in the study. The results revealed several major discrepancies whereby parents' perceived unhealthy products to be healthy – indicating a degree of consumer confusion among parents.

Disciplines

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CONSUMER CONFUSION: PARENTS NUTRITIONAL PERCEPTIONS OF FOOD ADVERTISEMENTS

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Track: Political, Social and Not-for-Profit Marketing

Abstract

Due to the increasing prevalence of childhood obesity in society, this study was undertaken to determine if advertisers could potentially be misleading parents through the nutritional claims made in advertisements for popular children's food products. Research was conducted to determine the sorts of nutritional messages parents received from four food advertisements. In total, 41 parents from an Australian university childcare centre participated in the study. The results revealed several major discrepancies whereby parents' perceived unhealthy products to be healthy – indicating a degree of consumer confusion among parents.

Introduction

Childhood obesity is an increasingly common problem that currently affects approximately 22 million children under the age of five worldwide (Rocchini 2002) and is often described as an epidemic due to its increasing prevalence in developed nations, making it one of the most common nutritional problems among children (Sorof and Daniels 2002). In Australia alone the childhood obesity rate has doubled over the past ten years with 20% of Australian children currently overweight and a further 10% obese (Thornton 2002). There are a number of detrimental health problems associated with childhood obesity, with the most prominent being an increased risk of type 2 diabetes, heart disease and abnormalities in blood-pressure (Rocchini 2002) and this is costing the Australian Government \$1.2 billion a year (Thornton 2002).

Literature Review

Much of the literature to date has heavily focused on the effects of food advertising to children, due to the common practice among food advertisers to directly target their advertising campaigns at children. An advertising audit conducted by the Australian Division of General Practice (ADGP) revealed that Australian children were being exposed to at least one junk food ad per commercial break during popular children's television programs, with fast food being the most commonly advertised followed by soft drink, ice cream and chocolate.

Children make attractive targets because of their vulnerability and also because many under the age of eight are unable to comprehend the concept of advertising, so “although children remember television advertisements, their purpose is not fully understood” (Oates, Blades and Gunter 2002). Young children therefore have fewer cognitive defenses against television advertising and often can't distinguish the difference between advertisements and television shows (Robertson and Rossiter, 1974).

Borzekowski, Robinson and Peregrin (2001) conducted a study to determine the influence television food advertising has on the food preferences of preschool aged children and

concluded that children who were exposed to a videotape containing food advertisements were more likely to choose the advertised brand than children who were exposed to the same videotape, but without the food advertisements. Similarly, Young and Hetherington (1996) found that food advertising targeted at children produced short-term effects whereby children wanted and preferred the advertised brand. This indicates that food advertising does have an effect on children's food preferences, nevertheless no direct links have been made in relation to food advertising and childhood obesity.

In addition to food advertising directly aimed at children, parents, especially mothers also play a very important role in relation to their children's nutrition and are often the main decider and purchaser in the family unit (McNeal 1987). A study conducted by Skinner, Carruth, Bounds and Ziegler (2002) over a five-year period found that mothers had the strongest influence on their children's food preferences and this in turn was often influenced by their own food preferences. Unfortunately, there has been a lack of research into the effects of food advertising on parents' perception of commonly consumed children's food items, thus it important to identify and understand the extent to which advertising influence parents' perceptions of children's food products and in turn their purchase intention.

Previous studies on food advertising have largely concentrated on the effects of television advertising with little attention being paid to magazines. Magazine advertising provides many advantages, namely it enables detailed product information to be conveyed. Parents can also process the information at their own pace and refer back to the advertisements whenever necessary – thus allowing more information processing of nutritional information to occur compared to television advertising (Shimp 1987)

Methodology

Research was conducted to determine the sorts of nutritional messages that parents received from four food advertisements found in popular women's magazines (The Australian Women's Weekly and Woman's Day) and their relative impact on purchase intention for the advertised brands. Magazine advertising was chosen above all other mediums because it enabled greater selectivity of target audience (Shimp 1997). Magazines therefore enabled the study to better measure parents' perception of nutritional claims made in food advertisements without the influence of children, because it was assumed that not many children would read The Australian Women's Weekly or Woman's Day. The use of magazines was also a more feasible means of testing food advertisements than television commercials.

The study was conducted using convenience sampling at an Australian university childcare centre, whereby 41 parents of young children participated in the study. The sample population comprised of 39% male and 61% female, with 64% of all respondents either staff or students of the university.

A survey was administered to participants and consisted of two main parts. The first part of the survey involved parents looking at four successive food advertisements and indicating on a four-point scale their intention to purchase each of the advertised products for their children. The purchase intention scale was labeled as (1) definitely would NOT buy, through to (4) definitely WOULD buy. While the second part of the survey asked parents to further rate each of the four advertised products based on a six-point scale for specific attributes such as calcium, salt, sugar and fat content relevant to the advertised product. Parents were also asked to give an overall health rating to each advertised product based on a six-point scale whereby

(1) was very unhealthy and (6) was very healthy. In addition to the parents' ratings, the actual contents of the advertised brands were determined using the nutritional panel located on the label of the products.

The first advertisement (ad 1) was by the Australian Dairy Corporation for milk and showed a young girl with a beaming smile holding a large glass of milk with the ten essential nutrients and their respective benefits printed down the side of the glass, followed by the caption "Give her a nice cold glass of essential nutrients". This advertisement was used as a control ad because it capitalizes on the healthy qualities of milk to promote and encourage parents to give their children more milk.

The second advertisement (ad 2) was for Blue Ribbon 'Carnival' Ice Cream, which showed an illustration of a family sitting around a table enjoying the ice cream while the grandmother tries to plant a kiss on the little boy's head. Below a caption states "Sharing BLUE RIBBON vanilla and chocolate ice cream swirled with choc flakes and topped with luscious chocolate sauce was always going to beat Nanna and her whiskery chin". This advertisement was also used as a control ad because it didn't attempt to make any health claims and instead employed humor and sensory gratification to market the ice cream.

The third advertisement (ad 3) was for Kraft 'Light' Peanut Butter, which depicted a young lady lying in front of the television holding a jar of peanut butter in one hand, while the other hand is raised to her mouth indicating that she is scooping the peanut butter with her finger and eating it in abundance straight out of the jar. The caption reads "For health nuts. With 25% less fat, who needs to work out?" This advertisement was used as a test ad because it promotes the light peanut butter as being so healthy that you can eat it by the jarful and not have to worry about exercising.

And lastly, the fourth advertisement (ad 4) was for Nestlé Milkybar Raspbar. This ad showed a huge milkshake glass surrounded by tiny pieces of the Milkybar Raspbar. The advertisement has a large caption at the top of the page, which reads "The taste of raspberries and milk. New Milkybar Raspbar" followed by a smaller caption at the bottom of the page claiming that Milkybar Raspbar has "the goodness of 3 glasses of milk with the taste of raspberries". This advertisement was also employed as a test ad because it attempts to promote Milkybar Raspbar as a healthy product.

The orders of the four advertisements presented to parents in the survey were randomized to minimize any ordering effects.

Findings

Table 1 provides a comparison of the actual nutritional content versus the participants' ratings of the nutritional content of the advertised products. Rankings from either 1 to 4 (for fat and sugar), or 1 to 3 (for calcium), have also been listed for each type of content, whereby 1 is the best rating in terms of health content of the product, 2 is the second best rating and so forth.

Table 1: Actual Content versus Parent Health Ratings of Nutritional Content

Ad	Calcium		Salt		Fat		Sugar	
	Actual Content	Parent Rating						
1. <i>Milk</i>	2 (11.6%)	1 (5.22)	-	-	1 (3.6%)	2 (3.93)	1 (4.8%)	1 (4.70)
2. <i>Ice-Cream</i>	3 (9.0%)	2 (3.76)	-	-	2 (7.0%)	3 (4.76)	2 (22.0%)	4 (1.68)
3. <i>Peanut Butter</i>	-	-	(7.13%)	2.83	3 (38.2%)	1 (3.32)	3 (30.9%)	2 (3.76)
4. <i>Milky-bar Raspbar</i>	1 (34.8%)	3 (3.39)	-	-	3 (34.5%)	4 (4.93)	4 (55.0%)	3 (1.80)

The comparison reveals several discrepancies between actual content and the perceived healthiness of each product. For example, Kraft Light Peanut Butter (ad 3) has the highest fat content of all the products, yet is perceived by parents as having the lowest fat content. Similarly, parents perceive the Blue Ribbon ice cream product (ad 2) as being highest in sugar, whereas the Milkybar Raspbar (ad 4) is nutritionally rated as highest in sugar. Furthermore, parents perceived a glass of Milk (ad 1) as being highest in calcium, whereas the Milkybar Raspbar (ad 4), as the ad claimed, contains the goodness of three glasses of milk and thus nutritionally rated in the calcium category as best.

Parents had the highest purchase intention for Milk (ad 1), with a mean rating of 3.63. The second highest purchase intention rating was for peanut butter (ad 3), with a mean of 2.39, while the purchase intentions for both the Ice Cream (ad 2) and Milkybar Raspbar (ad 4) were similar, with means of 2.20 and 2.17 respectively.

Discussion and Implications

From the study it can be seen that many parents have a healthy perception of milk and this in turn greatly affects their purchase intention. This could be due to the fact that milk is universally promoted as a healthy product, which children are encouraged to consume in order to grow strong and healthy. Parents are therefore more willing to accept the health claims made in ad 1 for milk because it is in-sync with their own beliefs and attitudes.

Ice cream (ad 2) however is largely regarded as an unhealthy product and this is reflected in the parents' purchase intention. Importantly, ice creams are not universally promoted as healthy and thus, like milk advertisements are not misleading.

Kraft 'Light' Peanut Butter (ad 3) on the other hand is an unhealthy product that is often subject to many health claims. As a result, parents are often confused by the mixed nutritional messages they receive and this can be seen in the survey responses. Many parents believed that Kraft 'Light' Peanut Butter was low in fat when in actual fact, it contained the highest level of fat of all four products tested (34.5g per 100g, i.e. 34.5%).

And lastly, Nestlé Milkybar Raspbar is an unhealthy product that contains a high level of calcium (equivalent to three glasses of milk). However, the survey results indicate that many parents were confused by this message and this was reflected in their ratings. Parents therefore did not believe that Milkybar Raspbar contained the equivalent of 3 glasses of milk, and instead many parents chose to believe that milk contained a higher calcium content - however this can also be attributed to the fact that Milkybar Raspbar is a new and unfamiliar product.

As a result of the parents' incorrect nutritional ratings of the products, no links between a product's health value and purchase intention could be established. This poses the question of whether health considerations are irrelevant to parents when making purchase decisions for their children or has advertising caused consumer confusion among parents?

Limitations and suggestions for future research

A major limitation of this study was the loss of colour during reproduction of the advertisements employed in the surveys and this has the ability to reduce the effectiveness of the advertisements presented to parents. The study was also conducted via convenience sampling whereby 64% of all respondents were either staff or students of the University, thus the sample population can be considered higher educated and this has the potential to underestimate the extent by which parents are misled by the advertisements. The surveys also doesn't take into consideration whether or not parent's purchase intention was impacted upon by their children's own taste preferences and more importantly – their inability to consume some of the advertised products due to allergies and allergic reactions. And lastly, the nutritional knowledge of parents was not taken into consideration.

A more detailed study is therefore recommended in the future to enable comparisons to be made between known products and newer emerging products. Future studies should also test the nutritional knowledge of parents because it is evident from the survey results that parents do not realise that Kraft Light Peanut Butter is unhealthy nor do they realise that Nestlé Milkybar Raspbar is actually high in calcium.

Conclusion

Tackling the childhood obesity epidemic is essential to ensure the future health of Australians. It is therefore important to understand not only the impact of food advertising on children, but also the extent to which parents understand, or are influenced by nutritional claims made in advertising due to the pivotal role they play in their children's diet. This study has revealed that parents in the sample population lack an understanding of the nutritional value of foods targeted at their children, thus there appears to be a degree of consumer confusion among parents in regards to the sorts of nutritional messages received from food advertisements.

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