

Northumbria Research Link

Citation: Ogba, Ike and Johnson, Rebecca (2010) How packaging affects the product preferences of children and the buyer behaviour of their parents in the food industry. *Young Consumers: Insight and Ideas for Responsible Marketers*, 11 (1). pp. 77-89. ISSN 1747-3616

Published by: Emerald

URL: <http://dx.doi.org/10.1108/17473611011026037>
<<http://dx.doi.org/10.1108/17473611011026037>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/2763/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

How packaging affects the product preferences of children and the buyer behaviour of their parents in the food industry

Ike-Elechi Ogba and Rebecca Johnson

Abstract

Purpose – Health is becoming an increasingly important issue in the UK as well as the rest of Europe. Emphasis on the importance of healthy eating is ongoing for many reasons, including the growing concern about childhood obesity resulting in the ban of advertising of unhealthy foods to children in the UK in April 2007. However, although legislation has been placed upon the advertising of unhealthy food products, no such restrictions have been placed on the packaging of children's foods despite the influence of packaging on consumer buyer decisions. This paper aims to investigate the effect of packaging on children's product preferences and its ability to influence parents' buyer decision in-store.

Design/methodology/approach – The study was approached from the parents' rather than the children's perspective. A quantitative approach was adopted in data collection, using a 28 item Likert scaled questionnaire administered to 150 parents, with over 95 percent response rate.

Findings – The study shows that packaging does affect the product preferences of children. Also, children are particularly interested in influencing the purchase of unhealthy foods. However, parents within the study claimed that they did not succumb to their children's requests for the purchase of unhealthy food, which contradicts evidence from previous findings.

Research limitations/implications – The claim by parents that they did not succumb to their children's requests for unhealthy food contradicts findings from previous research. This therefore leads to a recommendation for further studies as social desirability bias may have influenced the outcomes of the findings.

Practical implications – Findings from this study can be applied within the retail and service marketing sector to provide the practitioner with information relevant to decision making on children's influence on parents buyer behavior in-store. Outcomes of the study are also important when considering the future of children's food marketing and tackling the issue of childhood obesity.

Originality/value – The paper demonstrates that there is a relationship between packaging and children product preferences and children's influence on parents' buyer decision in-store.

Introduction

Current shifts in food trends have led to changes from normal, day to day food marketing to a focus on healthy food marketing, hence impacting on consumers' behavior. The impact of the change is more apparent on consumer perception, tests and needs, including change on products (foods) that are being manufactured and their subsequent positioning (Blackman, 2005). These changes have increased consumer awareness of and demand for healthy foods and information on the content of the foods they consume. It is now common for packaging and communications to contain tags such as "less than 5 percent fat" or "with no added sugar" as marketers look to reassure consumers that their offerings will have no negative impact on consumers and their family's health. Blackman (2005) emphasised the importance of healthy eating trends in the food industry by describing it as a war with "food and health as the key battlefield". It is now becoming common knowledge that in order to satisfy customers, marketers are becoming increasingly ethically conscious. Ethically conscious by reacting to demand for more responsible behavior in terms of the ways and manners in which products are presented to customers, like product packaging, and provision of clear information on nutritional content of their products, particularly where products could be seen as being marketed towards vulnerable groups such as children (Pettersson and Fjellstrom, 2006). This study therefore aims to explore the effect of packaging on children's product preferences and the influence of children's pressure (pester power) on parents' willingness to buy unhealthy foods. The study is approached from the parents' point of view rather than from the children's perspective. In other words, the issue of how packaging affects the product preferences of children and thus the buyer behavior of their parents will be explored through the opinions of parents. Data associated with the study will emanate from parents rather than their children.

Food marketing and packaging to children

Children have increasing spending power in terms of being customers in their own right (Pettersson and Fjellstrom, 2006). They are also major influencers within the family decision making unit. This power has resulted in children being increasingly attractive targets for marketers (Coughlin and Wong, 2002). This attractiveness of children as consumers and influencers of consumption is subsumed in McNeal's (1999, p. 213) that "virtually every adult consumer good from seeds to soap has been scaled down and funned up to suit children".

Food marketing can therefore be designed to target children as a market segment. As Hill and Tilley (2002, p.767) noted, "With constant advertising innovations, food manufacturers are gaining more and more access to children through the use of television after school and on Saturday morning". Whereas this practice is on the increase, the approach has also come under increasing pressure in recent times due to the worrying trend of childhood obesity in the UK. For example, in a Mintel (2006) report into children's attitudes towards food and drink, it was mentioned that there is frequent concern expressed about childhood obesity. Other reports also suggest a significant increase in child obesity. According to a BBC (2007, p. 1) Report, "Children are suffering from increased level of obesity, with 16 percent of children aged 2 to 15 years classed as obese in 2003, compared with 10-12 percent in 1995".

Following the above findings, after carrying out their own research, Ofcom felt it necessary to implement a progressively strict ban on the TV advertising of high fat, salt and sugar (HFSS) foods to children (Ofcom, 2007). This approach was heralded as a sign of positive direction towards managing child obesity problems in the UK. This is because observers believed it was a necessary step in controlling the growing influence of marketers' many techniques used to entice children into buying their products.

In a study of the nutritional content of products marketed to children, Fitzhugh and Lobstein (2000, pp. 13-14) defined and classified a children's food product as one which used "familiar cartoon characters appealing to children (e.g. Tony the Tiger, Mr Men); tie-ins with children's TV programmes or films (e.g. Postman Pat, Star Wars); child-oriented animals or creatures (e.g. dinosaurs, sharks); child-oriented product shapes (e.g. alphabet pasta); free gifts or special promotional offers suitable for children; use of words such as 'kids' or 'ideal children's snack' or 'perfect for school lunchboxes'".

In a similar study, Roberts (2005) probed into children's perception and attitude to food and referred to children's food as that which can be a combination of food and fun. In other words, children's food should be perceived as "eatertainment". Roberts (2005) identified specific "eatertainment" techniques employed by marketers like: premium offers, i.e. offers of free gifts such as free toys, stickers, trading cards, etc. inside packages of snack foods, cereals and convenience foods; children's licensed characters and movie tie-ins on food packaging; "Kidz meals" combining child-sized portions of food with soft drinks and free toys or confectionery; fun product designs that incorporate interactive play value, often incorporating unusual shapes, textures, colours, tastes and smells, and characters printed directly onto the food.

Marketers were identified as using the concept of "eatertainment" to target children through advertising and packaging of their products by sending messages of fantasy and fun, thus ignoring the preferences of parents and their assumed preference for health and nutrition (Kelly et al., 2006). Marketers consistently use techniques both above and below the line to influence the preferences of children in the hope that they will influence purchase decisions. Packaging as one of the techniques no longer simply serves a functional purpose; it has become an important element of branding, positioning and related communication as part of an integrated marketing communications campaign (Ahmed et al., 2005). Rettie and Brewer (2000) described packaging as "a vehicle for communication and branding". In a similar view, Hill and Tilley (2002) in McNeal and Ji (2003) described packaging as the "silent salesman". The validity of this view can be made clearer in a Henley Centre study (Frontiers 1996 cited in Rettie and Brewer, 2000), which found that 73 percent of purchase decisions are made at point of sale with packaging as a key indicator or influencer on peoples' choice.

In line with the above discussions, evidence suggests that marketers intentionally target more children than parents in their design of product packaging. This is done in anticipation of children developing interest on the product as a result of the packaging and therefore pressure and influence parents' buyer behavior as shown in Figure 1.

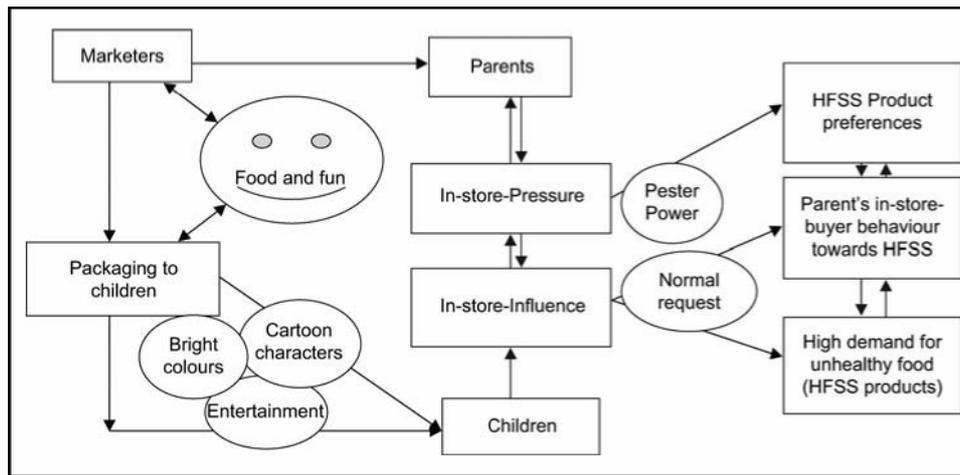
The influence of packaging on children's preferences

Although the Food Standards Agency (2007) and Ofcom have recognised the need for a ban in the advertising of HFSS foods to children, there is of yet no such restrictions in relation to packaging.

Silayoi and Speece (2004) carried out focus groups with adults and found that both visual and informational elements influenced purchase decisions. Although the study was not on children, there are other studies that argue that due to children's lower abilities to process information, they are likely to assess products and their packaging mainly on a visual level, in addition to informational elements. Marketers therefore constantly use attractive visual imagery, recognisable characters, colour and design to ensure their product stands out to children. This concept of children's ability to process mainly on a visual level is supported by Dammler and Middelmann-Motz (2002) who asked readers to picture themselves in a foreign country where they could not read the language. In these circumstances, judgements about products would be made purely on a visual level in the same way that children judge all products and look for information that they can make sense of, e.g. a recognisable character.

Figure 1

Packaging and children



Gelperowic and Beharrell (1994) carried out an exploratory study on parents, rather than children, to investigate product and packaging factors that affect mother and child purchase decisions. Through focus groups with mothers, Gelperowic and Beharrell (1994) were able to identify that children were definitely attracted by “nice looking” packaging. It was concluded that in order for an item of food to be purchased by the mother, it must look appealing to the child so that the mother can be assured that the child will eat it and unnecessary waste be avoided. Therefore it is clear from this study that mothers believe that packaging can have an effect on their children’s requests and also that mother’s often succumb to these requests in order to avoid a conflict situation.

Hill and Tilley (2002) carried out an in-depth qualitative study with children to determine whether packaging was an important issue in child preferences and their related decision making process. Through focus groups they identified that all children had a justifiable preference in terms of cereal and could identify the character on the front of their favourite cereal box as well as others. This emphasises the strength of the use of characters in communication with children. They concluded that packaging played a significant part in the child decision making process with children having a preference for different characters. Marshall et al. (2006) also found that colour was an important element in food choice. Products marketed towards children are brightly coloured in order to attract their eye and make them seem fun and exciting; this is in line with Roberts (2005) concept of “eatertainment”. That is, children may respond to food products not necessarily because of the nutritious nature, but for the fun or perceived imaginary or actual entertainment to be enjoyed.

However in all of these studies it is unclear whether packaging has simply acted as a prompt to advertising previously seen by respondents or whether packaging does impact on children preferences. With the HFSS food ban in full operation, it is therefore necessary to explore whether a direct relationship exists between packaging and children’s preferences, and whether similar restrictions need to be applied to the packaging of children’s products. This study therefore hypothesizes that:

H1. Packaging has a strong impact on childrens’ product preferences. The child’s influence on the purchase decision.

Sometimes, through packaging, marketers look to market children’s products to parents. Other times they look to bypass parents and communicate with children directly, making them the influencers and advocates of their product and thus influencing their parents’ purchasing decisions. Kelly et al. (2006) found that parents found it increasingly difficult to deny their children food products that were licensed (endorsed) by their favourite characters or celebrities. Particular concern with these marketing methods is necessary as they are largely used to promote unhealthy foods (Roberts, 2005).

The marketing of food products to children is thought to be one of the factors that can activate “pester power” (or “nag factor”). Nicholls and Cullen (2004) defined pester power as a child’s attempts to exert influence over parental purchases in a repetitive and sometimes confrontational way, but – and this is important – also with some degree of success. They identified three product categories that are of interest to children where they would try to influence purchase through pester power, namely clothing, toys and food. They felt that the most stressful environment for a parent and child to enter is a supermarket because the child is most likely to be there as an “unavoidable companion rather than as a pre-selected choice-maker” and all products are displayed and readily available for the child to see.

Several studies have attempted to measure the influence of pester power on parents’ purchase decisions. Gelperowic and Beharrell (1994) claimed that children have increasing influence in family purchase decisions and although mothers may wish their children to eat healthily, the lack of appeal of non-HFSS foods counteract this, as children are attracted to unhealthy HFSS foods. Manufacturers are increasingly using developed technology to

create products that appeal to children through fun packaging and new shapes. Unfortunately these products are not always healthy and more often than not mothers give into pester power in order to avoid conflict. They found that 33 percent of respondents admitted that their children did have an influence on purchase behavior and only 6 percent said that they had no influence at all.

Morales (2000) estimated that 34 percent of sales in the food category are driven by children nagging. McNeal (1992), cited in Nicholls and Cullen (2004) suggested that children make an average of 15 purchase requests on a given shopping trip; he estimated that between 40 percent and 80 percent of these requests were granted.

From the above review, specific gaps can be identified in the literature. Although there is plenty of evidence on children's pester power and overall influence on parents' purchase decisions, there remains the need for further study to identify whether packaging alone can stimulate pester power. Such research is necessary, as there is a lack of studies with a specific focus on packaging alone. Several studies from the children's point of view support the viewpoint that children do influence their parents' buyer behavior (Ward et al., 1977; Bennett, 1991; Gunter and Furnham, 1999; Hill and Tilley, 2002; Nicholls and Cullen, 2004). Our study therefore further hypothesizes that:

H2. Children are more likely to influence the purchase of unhealthy foods due to influence from packaging.

H3. Children have a strong influence on their parent's buyer behavior in food choices for children.

The uniqueness of this study lies in its attempt to extend existing studies on children's influence on parents' buyer behavior by looking at whether packaging alone can influence buyer behavior and children's influence and pressure on parents buyer behavior from the parents' point of view. That is, to explore parents' perceptions on children's influence and pressure on their in-store buyer behavior.

Methods

In conducting this study, survey questionnaires were administered for data collection. The suitability of this approach is based on methods and approaches employed in similar studies.

The questionnaire

In exploring how packaging affects product preferences of children and thus the buyer behavior of their parents, a 28 scale item questionnaire was developed around issues discussed in the literature; for example, influence of packaging on children; the influence children have with their parents in terms of pester power behaviors and the types of products they look to influence the purchase of, and the likelihood parents are to yield to child influence and pressure. See Appendix for the questionnaire used.

Because of the sensitive nature of the research, i.e. children as the subject matter, the authors were concerned that respondents may have found direct questions too intrusive and thus the Likert scale was adopted. Jankowicz (2005) emphasises the importance of encouraging a feeling of safety in respondents; the replacement of intrusive questions with Likert scales enables this. The questionnaire was therefore structured in form of a five-point Likert questionnaire using the "strongly agree/agree/neither agree nor disagree/disagree/ strongly disagree" format. Structuring the questionnaire in this way allows for adequate analysis of data and the use of such procedures as correlation analysis in exploring relationships between variables.

Sample data collection and demographics

Two indoor adventure softplay centres in County Durham and North Tyneside granted permission for the researchers to distribute questionnaires on their premises. Parents were approached with the research questionnaire during the hours that the centres were opened to public use. Participants were given sufficient time to study the questionnaire, ask questions and obtain clarification if necessary on issues associated with the research and questionnaire before completion.

A total of 150 questionnaires were administered, with 145 questionnaires completed by parents who were accompanying their own child/children to the soft play centre. 81 percent of respondents (parents) were female and 19 percent male. Parents with children between the age groups 0-3 years, 4 to 6 years, 7 to 10 years, 11 to 13 years and 14 and above responded to the research questionnaire. 23.8 percent of respondents visited a supermarket more than once a week, 40.6 percent visited once a week, 14 percent once a fortnight/a month and 21 percent rarely. However, only 24 percent took their child shopping with them more than once a week. 34 percent of respondents had both male and female children, 30 percent male only and 36 percent female only. Assessing scale suitability: scale items reduction and factor extraction

In order to measure the suitability and usability of the questionnaire as shown in the list above, exploratory factor analysis was used in form of a Principal Component Analysis (PCA) with varimax for data/scale items reduction, factor extraction and identification of smaller sets of factors with eigenvalues greater than or equal to 1.0. The scale reliability was also estimated using Cronbach's alpha internal consistency measure.

Prior to conducting the statistical test, three variables were identified from our review of the literature: child influence, influence of packaging and parental yielding to requests. The outcome of the analysis was the reduction of the 28 items to 12 usable items (see Table I). The suitability of the 12 items was evident in the extraction of three factors (components) that fit into the three variables as shown in Tables I and II. Component 1 represents the influence of packaging on children; component 2, the influence children subject to their parents (in

terms of pester power behaviors and the types of products the look to influence the purchase of) and component 3, the likelihood the parent is to yield to child influence.

	Component		
	1	2	3
My child's product preferences are influenced by bright colours used in packaging	0.872		
My child's product preferences are influenced by product specific characters on packaging	0.828		
My child's product preferences are influenced by the character licences used on packaging	0.806		
My child's product preferences are influenced by offers of free gifts on packaging	0.703		
My child's product preferences are influenced by character licences used on packaging	0.649		
My child tries to influence my purchases by making verbal requests		0.749	
My child tries to influence the purchase of cereals		0.748	
My child often tries to influence the purchases I make in store		0.684	
My child tries to influence the purchase of confectionary		0.672	
My child tries to influence the purchase of yoghurts		0.664	
I buy products that my child requests			0.837
I take my child's preferences into consideration when I go food shopping			0.812

Notes: Extraction method: principal component analysis; rotation method: varimax with Kaiser normalization. A rotation converged in five iterations

Component	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cum. %	Total	% of variance	Cum. %	Total	% of variance	Cum. %
1	4.804	40.034	40.034	4.804	40.034	40.034	3.397	28.307	28.307
2	1.629	13.575	53.609	1.629	13.575	53.609	2.740	22.835	51.142
3	1.198	9.986	63.595	1.198	9.986	63.595	1.494	12.454	63.595

Outputs from the rotated component matrix in Table I also shows that five items from the 12 scale items relate to the first factor extraction (component 1), five items to the second factor (component 2) and two items to the third factor (component 3).

Reliability of scale items

The 12 items scale was also subjected to internal reliability assessment with a 0.863 alpha, evidence of scale item dependability and suitability, i.e. the scale items are indeed measuring the influence of packaging on children and children's pester power over parents' decision process.

Data analysis

To assess the effect packaging has on children's product preferences and further explore whether there are differences between ages of children, the study employed MANOVA and Pearson's Product Moment Correlation Coefficient.

Investigating parents perception on the effects of packaging on their child

Output from the assessment of the effect of packaging on children's product preferences shows that 62 percent of respondents agreed that their child's product preferences are influenced by product packaging. A breakdown of specific aspects of packaging influences shows that 50 percent of respondents agreed that their children's product preferences are influenced by bright colours used in packaging, and 50 percent of respondents agreed that their child's product preferences are influenced by product specific characters on packaging, including free gifts of toy characters. Parents also agreed that their children's product preferences were influenced by packaging.

Investigating effect of packaging and children Preferences

Output from the assessment of the relationship between children's preferences and the influence of packaging with bright colours, character licences, product specific characters on packaging and offers of free gifts, shows evidence of relationships with correlations of 0.750, 0.561, 0.607, and 0.611, with (p , 0.01 significance level. (see

Table III). The findings support the research proposition that children are likely to be influenced by packaging and its associated variables. The findings also agree with the views from Silayoi and Speece

Table III Pearson's product-moment correlation coefficients

	Q17 My child's product preferences are influenced by the packaging Pearson correlation	Sig. (two-tailed)	n
My child's product preferences are influenced by bright colours used in packaging	0.750*	0.000	144
My child's product preferences are influenced by character licences used on packaging	0.561*	0.000	144
My child's product preferences are influenced by product specific characters on packaging	0.607*	0.000	144
My child's product preferences are influenced by offers of free gifts on packaging	0.611*	0.000	143

Note: *Correlation is significant at the 0.01 level (two-tailed)

(2004) and Marshall et al. (2006) that colour of packaging and other associated variables exercise influence on children's product preferences.

Investigating effect of packaging and children's influence on purchases

Output from the analysis as shown in Table IV shows evidence of a relationship between child influence on the parent and packaging influence on the child with a mean correlation of 0.446 (significance level, $p < 0.01$). This suggests that packaging can indeed have influence on children's product preferences. This aligns with Gelperowic and Beharrell (1994) research findings in which parents reported that packaging had influence on their children's product preferences. The output also agrees with Hill and Tilley's (2002) and Coughlin and Wong's (2002) findings where children directly responded to their study and reported that they were drawn to products with attractive packaging.

Investigating children's influence on the purchase of unhealthy foods

Results from assessing children's attempts to exert influence over their parents shows that 59 percent of respondents agreed that their children tried to influence the purchases that they make in-store. 61 percent of respondents agreed that their children tried to influence their purchases by making verbal requests for products like confectionery when they went shopping. Evidence also shows that 47 percent, and 50 percent of respondents respectively agreed that their children attempted to influence the purchase of products like cereals and yoghurts. In assessing the relationship between the types of foods that children tend to request and children's attempt to influence the purchases parents make in-store; relationships are strongest between children's influence and requests for confectionery ($r = 0.536$), snack foods ($r = 0.493$) and cereals ($r = 0.448$) as shown in Table V. This is in line with Marshall et al. (2007) research outcomes which reported that children were most likely to try to influence parents in the snack food, confectionery and breakfast cereal aisles. It also fits into previous research outcomes by Coughlin and Wong (2002) which identified the cereal and snacks aisles as "hotspots" in the supermarket where children were most likely to attempt to influence their parents' purchase behavior. There is also a correlation ($r = 0.456$) between children's influence on parents purchase in store and children's influence of the purchase of unhealthy products.

Investigating children's influence on parent's buyer behavior

Outcomes from further assessment of the likelihood of parents yielding to their children's requests (see Table VI) as represented in the factor loadings of component 3, 39 percent of respondents agreed that they took their children's product preferences into consideration when they went shopping. However, only 21 percent of respondents agreed that they bought products that their child requested. In order to directly investigate a relationship between child requests and parent yielding, a scatterplot was produced with wide dispersion,

Table IV Pearson's product-moment correlation coefficient (H1)

	Q3 My child often tries to influence the purchases I make in store	Pearson correlation	Sig. (two-tailed)	n
My child's product preferences are influenced by the packaging	0.452*	0.000	144	
My child's product preferences are influenced by bright colours used in packaging	0.449*	0.000	143	
My child's product preferences are influenced by character licences used on packaging	0.447*	0.000	143	
My child's product preferences are influenced by product specific characters on packaging	0.368*	0.000	143	
My child's product preferences are influenced by offers of free gifts on packaging	0.514*	0.000	142	

Note: *Correlation is significant at the 0.01 level (two-tailed)

Table V Pearson's product-moment correlation coefficient (H2)

	Q3 My child often tries to influence the purchases I make in store	Pearson correlation	Sig. (two-tailed)	n
My child tries to influence the purchase of confectionary	0.536**	0.000	141	
My child tries to influence the purchase of fizzy drinks	0.262**	0.002	142	
My child tries to influence the purchase of cereals	0.448**	0.000	143	
My child tries to influence the purchase of yoghurts	0.317**	0.000	144	
My child tries to influence the purchase of tinned foods	0.162	0.052	144	
My child tries to influence the purchase of fruit and veg	0.083	0.321	144	
My child tries to influence the purchase of frozen foods	0.079	0.345	143	
My child tries to influence the purchase of snack foods	0.493**	0.000	144	
My child tends to try to influence the purchase of unhealthy products	0.456**	0.000	144	

Notes: *Correlation is significant at the 0.05 level (two-tailed); **correlation is significant at the 0.01 level (two-tailed)

Table VI		Pearson's product-moment correlation coefficient (H2)			
	024 I buy products that my child requests		03 My child often tries to influence the purchases I make in store		
	Pearson correlation	Sig. (two-tailed)	n	Pearson correlation	Sig. (two-tailed)
I buy products that my child requests	1		145	0.114	0.176
My child often tries to influence the purchases I make in store	0.114	0.176	144	1	144

demonstrating that there is no relationship between the two variables. This is in contradiction to Gelperowic and Beharrell's (1994) qualitative study in which parents agreed that they often gave into their children's requests in order to avoid conflict. Further analysis exploring possible association between the two variables also confirms lack of a strong relationship

The outcomes also contradict the findings discussed in the literature and thus H3, which hypothesizes that children have a strong influence on their parent's buyer behavior. The results are also in contradiction to Kelly et al. (2006) finding that parents found it increasingly difficult to deny their children food products which were licensed by their favourite characters or celebrities. It also questions the views expressed in McNeal (1992), cited in Nicholls and Cullen (2004) that children make an average of 15 purchase requests on a given shopping trip of which McNeal estimated that between 40 percent and 80 percent were granted. These findings although contradictory with the literature are unique and could be argued to be so on the grounds that whereas some of the research in which children were viewed as able to have strong influence on their parents buyer behavior involved children, in this study, parents as research participants on their views did not accept that children influence their buyer behavior. This contradiction may be as a result of parents not willing to accept or own up to yielding to child pressure.

Discussion and summary

The outcome from this research analysis on the effect of packaging on children's product preference and thus its impact on parents' buyer behavior shows that as in similar studies, Fitzhugh and Lobstein, 2000; Owen, 2004) packaging affects children's preferences. It also identified the likelihood of manufacturers of unhealthy foods employing character licences to get children to request their products. Similarly, it shows that there is the likelihood of children influencing the purchase of unhealthy foods, specifically cereal, snacks and confectionery (McNeal and Ji, 2003; Coughlin and Wong, 2002; Marshall et al., 2007). These outcomes validate findings in the literature that packaging affects children's product preferences and influences their choice, (Hill and Tilley, 2002; Silayoi and Speece, 2004; Dammler and Middelman-Motz, 2002; Gelperowic and Beharrell, 1994; Marshall et al., 2006). Although most of the above studies were conducted prior to the advertising ban of HFSS food products to children this research outcome fits with outcomes from the above similar studies. It was unclear whether in these published papers packaging was simply acting as a prompt to advertising viewed by children or whether packaging alone was strong enough to stimulate influencing behaviors in children.

In line with the above, this study also explored the likelihood that parents will comply with children's requests. Literature findings suggest that parents often find it difficult to deny their children the products they requested (Kelly et al., 2006; Gelperowic and Beharrell, 1994; Morales, 2000; McNeal, 1992 cited in Nicholls and Cullen, 2004). However, unlike the analysis on the influence of packaging where there were agreements between outcomes and literature, this study found that parents do not routinely give into their children's requests. A non-significant relationship was found between children's attempt to influence the purchases parents make in-store and what products parents actually buy. This finding is in direct contradiction with that from the literature review. However, it is important to note that parents may have responded to the questionnaire in the way they feel is expected of them as a good parent (Reece, 1990).

Implications of study

Two of the research propositions outlined at the beginning of this study were supported by the primary research: packaging does have an influence on children's product preferences, and children are more likely to attempt to influence the purchase of unhealthy foods. Considering the current climate in the UK and Europe with health an increasingly important issue and childhood obesity an increasingly worrying problem (Blackman, 2005), these findings have significant implications for marketing practice in the UK. The ban on TV advertising of unhealthy products to children was enacted in order to further combat childhood obesity. The results from this study and previous studies suggest similar restrictions are necessary on the packaging of unhealthy foods. If packaging can influence children's preferences and stimulate demand in the same way that TV advertising can (Ofcom, 2007), then it is logical that restrictions should be placed on the packaging of children's foods in order to take a further step towards combating childhood obesity.

The results from this study also emphasise the importance of packaging as an element of the marketing mix, i.e. "the silent salesman" (McNeal and Ji, 2003) and the power it can have as a communications tool. The results therefore contribute to the theory outlined in the literature relating to the importance of packaging as a

differentiator in the marketplace. Buyer behavior theory in terms of the family decision making unit is also supplemented. Although one of the findings of this study is contradictory to those concluded by other researchers, they add to the knowledge base in terms of the child's role in the family decision making unit.

Research limitations

Although this research explored and tested relevant research hypothesis, there are, however, a few limitations to be acknowledged. Amongst such limitations is that although the research is largely based on the buyer behavior of children, we sampled parents. The results therefore represent parents' interpretations and views of their children's behavior rather than children's views

The claims of parents that they don't give into their children's requests, as they are aware that this is the right thing to do should be pursued further using methods such as qualitative interviews focus groups to enable a more in-depth questioning of respondents to obtain further information.

Recommendation for further research

Due to the limitations described above, there are several recommendations for further study.

As the findings of this study are in conflict with previous research in terms of parents' likelihood to give into their children's request, it is suggested that this is an area requiring further investigation. As previously noted, adopting a qualitative approach would be most beneficial in order to identify underlying reasons behind the identified behavior. Although the survey did identify the ages of children of participating parents, the study did not directly involve children. An interesting study would be to examine the research topic by directly involving children as participants rather than their parents.

References

- Ahmed, A., Ahmed, N. and Salman, A. (2005), "Critical issues in packaged food business", *British Food Journal*, Vol. 107 No. 10, pp. 760-80.
- BBC (2007), "Did microwaves spark obesity?", *BBC News*, 6 June, available at: <http://news.bbc.co.uk/1/hi/health/6725775.stm>
- Bennett, W. (1991), "Young shoppers hold sway over parents choices", *The Independent*.
- Blackman, C. (2005), "A healthy future for Europe's food and drink sector?", *Foresight*, Vol. 7 No. 6, pp. 8-23.
- Coughlin, R. and Wong, T. (2002), "The retail world from a kid's perspective", *Advertising and Marketing to Children*, Vol. 4 No. 1, pp. 3-8.
- Dammler, A. and Middelmann-Motz, A.V. (2002), "I want the one with Harry Potter on it", *Advertising and Marketing to Children*, Vol. 3 No. 2, pp. 3-8.
- Fitzhugh, K. and Lobstein, T. (2000), *Children's Food Examined: An Analysis of 358 Products Targeted at Children*, The Food Commission, London.
- Food Standards Agency (2007), *Key Facts*, 1 April.
- Gelperowic, R. and Beharrell, B. (1994), "Healthy food products for children: packaging and mothers purchase decisions", *British Food Journal*, Vol. 96 No. 11, pp. 4-8.
- Gunter, B. and Furnham, A. (1999), *Children as Consumers: A Psychological Analysis of the Young People's Market*, Routledge, London.
- Hill, H. and Tilley, J. (2002), "Packaging of children's breakfast cereal", *British Food Journal*, Vol. 104 No. 9, pp. 766-77.
- Jankowicz, A.D. (2005), *Business Research Projects*, 4th ed., Thomson Learning, London.
- Kelly, J., Turner, J.J. and McKenna, K. (2006), "What parents think: children and healthy eating", *British Food Journal*, Vol. 108 No. 5, pp. 413-23.
- McNeal, J. (1999), *The Kids Market: Myths and Realities*, PMP, New York, NY.
- McNeal, J.U. and Ji, M.F. (2003), "Children's visual memory of packaging", *Journal of Consumer Marketing*, Vol. 20 No. 5, pp. 400-27.
- Marshall, D., O'Donohoe, S. and Kline, S. (2007), "Families, food, and pester power: beyond the blame game?", *Journal of Consumer Behaviour*, Vol. 6 No. 4, pp. 164-81.
- Marshall, D., Stuart, M. and Bell, R. (2006), "Examining the relationship between product package colour and product selection in pre-schoolers", *Food Quality and Preference*, Vol. 17 Nos 7-8, pp. 615-21.
- Mintel (2006), "Children's attitudes to food and drink UK", *Mintel International Group Database*. Morales, E. (2000), "The nag factor: measuring children's influence", *Admap*, March.
- Nicholls, A.J. and Cullen, B. (2004), "The child-parent purchase relationship: pester power, human rights and retail ethics", *Journal of Retailing and Consumer Services*, Vol. 11 No. 2, pp. 75-86.
- Ofcom (2007), *Television Advertising of Food and Drink Products to Child: Final Statement*, 22 February.
- Owen, N. (2004), "Cool for kids but hot on health", *Young Consumers: Insight and Ideas for Responsible Marketers*, Vol. 5 No. 2, pp. 61-4.
- Pettersson, A. and Fjellstrom, C. (2006), "Responsible marketing to children and their families", *Young Consumers: Insights and Ideas for Responsible Marketers*, Vol. 7 No. 4, pp. 13-18.
- Reece, B.L. (1990), *Food Marketing*, 2nd ed., Glencoe/McCraw Hill, Columbus, OH.
- Rettie, R. and Brewer, C. (2000), "The verbal and visual components of package design", *Journal of Product and Brand Management*, Vol. 9 No. 1, pp. 56-70.
- Roberts, M. (2005), "Parenting in an obesogenic environment", *Journal of Research for Consumers*, No. 9.
- Silayoi, P. and Speece, M. (2004), "Packaging and purchase decisions: an exploratory study on the impact of

involvement level and time pressure”, British Food Journal, Vol. 106 No. 8, pp. 607-28.

Ward, S., Wackman, D. and Wartella, E. (1977), How Children Learn to Buy: The Development of Consumer Information Processing Skills, Sage Publications, Beverley Hills, CA.

Further reading

Jones, G. and Morgan, N.J. (1994), Adding Value: Brands and Marketing in Food and Drink, 1st ed., London.

Strachan, J., Pavie-Latour, V. and Forum, -. (2008), “food for thought: shouldn't we actually target food advertising more towards kids and not less?”, International Journal of Market Research, Vol. 50 No. 1, pp. 13-27.

Appendix

Research questionnaire

I am happy to take my child shopping with me.

I look for ways to avoid taking my child shopping with me.

My child often tries to influence the purchases I make in store.

My child tries to influence my purchases by pointing.

My child tries to influence my purchases by making verbal requests.

My child tries to influence my purchases by reaching for items.

My child tries to influence my purchases by putting items in my trolley/basket.

My child tries to influence the purchase of confectionary.

My child tries to influence the purchase of fizzy drinks.

My child tries to influence the purchase of cereals.

My child tries to influence the purchase of yoghurts.

My child tries to influence the purchase of tinned foods such as spaghetti hoops.

My child tries to influence the purchase of fruit and vegetables.

My child tries to influence the purchase of frozen foods.

My child tries to influence the purchase of snack foods.

My child tends to try to influence the purchase of unhealthy products.

My child's product preferences are influenced by the packaging.

My child's product preferences are influenced by bright colours used in packaging.

My child's product preferences are influenced by character licences used on packaging, e.g. Harry Potter.

My child's product preferences are influenced by product specific characters on packaging, e.g. Tony the Tiger.

My child's product preferences are influenced by packaging which is an interesting shape.

My child's product preferences are influenced by offers of free gifts displayed on packaging.

I take my child's preferences into consideration when I go food shopping.

I buy products that my child requests.

I sometimes buy the products my child requests in order to avoid conflict.

I only buy the products that my child requests if they are high in nutritional value.

I feel it is unethical for marketers to use methods such as these, e.g. bright colours, characters and free gifts.

TV advertising of foods high in fat, salt and sugar has been banned since April 2007.

I believe a ban relating to the packaging of unhealthy foods is necessary.