

IMPACT OF PACKAGE ELEMENTS ON CONSUMER'S PURCHASE DECISION

Rita Kuvykaite¹, Aistė Dovaliene², Laura Navickiene³

^{1,2}*Kauno technologijos universitetas, Lietuva, ¹rita.kuvykaite@ktu.lt, ²aiste.dovaliene@ktu.lt*

³*LRS, Lietuva, laura_guogaite@yahoo.co.uk*

Abstract

Due to increasing self-service and changing consumers' lifestyle the interest in package as a tool of sales promotion and stimulator of impulsive buying behaviour is growing increasingly. So package performs an important role in marketing communications, especially in the point of sale and could be treated as one of the most important factors influencing consumer's purchase decision. Literature analysis on question under investigation has shown that there is no agreement on classification of package elements as well as on research methods of package impact on consumer's purchase decision. By this article we seek to reveal elements of package having the ultimate effect on consumer choice. Taking into consideration that package could be treated as a set of various elements communicating different messages to a consumer; the research model was developed and tested in order to reveal impact of visual and verbal package elements on consumer's purchase decisions.

Keywords: packaging, elements of package, consumer's purchase decision.

Introduction

In nowadays competitive environment the role of package has changed due to increasing self-service and changing consumers' lifestyle. Firms' interest in package as a tool of sales promotion is growing increasingly. Package becomes an ultimate selling proposition stimulating impulsive buying behaviour, increasing market share and reducing promotional costs.

According to Rundh (2005) package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Also package imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behaviour (Wells, Farley & Armstrong, 2007). Thus package performs an important role in marketing communications and could be treated as one of the most important factors influencing consumer's purchase decision. In this context, seeking to maximise the effectiveness of package in a buying place, the researches of package, its elements and their impact on consumer's buying behaviour became a relevant issue.

Literature analysis on question under investigation has shown that there is no agreement on classification of package elements as well as on research methods of package impact on consumer's purchase decision. Some of researchers try to investigate all possible elements of package and their impact on consumer's purchase decision (Silayoi & Speece, 2004; Silayoi & Speece, 2007; Butkeviciene, Stravinskiene & Rutelione, 2008), while others concentrates on separate elements of package and their impact on consumer buying behaviour (e.g., Vila & Ampuero, 2007; Madden, Hewett & Roth, 2000; Underwood *et al.*, 2001; Bloch, 1995). Moreover some researchers investigate impact of package and its elements on consumer's overall purchase decision (e.g., Underwood *et al.*, 2001), while others – on every stage of consumer's decision making process (e.g., Butkeviciene *et al.*, 2008). Furthermore the abundance of scientific literature on this issue do not provide unanimous answer concerning impact of package elements on consumer's buying behaviour: diversity of the results in this area depends not only on research models constructed and methods employed, but on the context of the research too. All above mentioned confirms the necessity to investigate this issue in more detail. In the light of these problematic aspects, *research problem* could be formulated as following question: what elements of a package have an ultimate effect on consumer purchase decision?

The aim of this paper – basing on theoretical analysis of package elements and their impact on consumer's purchase decision empirically reveal the elements having the ultimate effect on consumer choice in a case of different products.

Research methods: systematic and comparative analysis of scientific literature; empirical research employing quantitative personal survey method.

Theoretical and empirical background

The role of packaging. The primary function of packaging is to protect the product against potential damage while transporting, storing, selling and exploiting a product (Gonzalez, Thorhsbury & Twede, 2007; Wells *et al.*, 2007; Kuvykaite, 2001) and to ensure the convenience during performance of these activities. Sogn-Grundvag & Østli (2009) have indicated the importance of packaging in the case of grocery, when consumers buy unbranded products. Seeing that most consumers tend to touch products before purchasing, they treat product packaging as a tool for protecting consumers from contamination, for allowing them to touch products without restraint, without need to avoid smudging their hands. They propose to use packaging with a “window”, in order to allow consumers to evaluate product by its appearance at the same time reducing “consumer uncertainty regarding quality by branding the product and labelling it” (Grundvag & Østli, 2009, p.225), i.e. to communicate to consumer adequate message about product. It could be stating that in length of time a function of identification and communication became of vital importance especially for consumer products in the group of convenience goods.

Packaging as a tool for communication was investigated by Butkeviciene *et al.* (2008), Gonzalez, Thorhsbury & Twede (2007), Vila & Ampuero (2007), Nancarrow, Wright & Brace (1998), Prendergast & Pitt (1996), Smith & Taylor (2004), Underwood *et al.* (2001), Silayoi & Speece (2004), Underwood (2003), (Vazquez, Bruce & Studd, 2003; Ampuero & Vila, 2006), etc. Taking into consideration that impulsive buying is a proper to many consumers (Nancarrow, Wright & Brace, 1998; Vazquez, Bruce & Studd, 2003; Ampuero & Vila, 2006), it could be maintained that “the package may be the only communication between a product and the final consumer in the store” (Gonzalez *et al.*, 2007, p.63). Consequently the role of package in marketing communications increases: it must attract consumer’s attention and transmit adequate value of product to consumer in the short period right in the place of sale. Therefore there is a necessity to explore package and its elements in more detail, in order to understand which of these elements are the most important for consumer’s purchase decision.

Elements of a package. There are many different schemes for classification of elements of package in scientific literature. According to Smith & Taylor (2004), there are six variables that must be taken into consideration by producer and designers when creating efficient package: form, size, colour, graphics, material and flavour. Similarly, Kotler (2003) distinguishes six elements that according to him must be evaluated when employing packaging decisions: size, form, material, colour, text and brand.

Vila & Ampuero (2007) similar to Underwood (2003) distinguished two blocks of package elements: graphic elements (colour, typography, shapes used, and images) and structural elements (form, size of the containers, and materials). It should be noticed that these two blocks, similar to classification of Smith & Taylor (2004) do not include verbal elements of package.

Rettie & Brewer (2000) stressed out the importance of proper positioning of elements of package, dividing the elements into two groups: verbal (for example, brand slogans) and visual (visual appeal, picture, etc.) elements. In the similar way package elements were classified by Butkeviciene, Stravinskiene & Rutelione (2008). Analysing consumer’s decision making process they distinguish between non-verbal elements of package (colour, form, size, imageries, graphics, materials and smell) and verbal elements of package (product name, brand, producer/ country, information, special offers, instruction of usage). Their classification includes brand as a verbal component, whereas Keller (2003), for example, considers packaging as one of the five elements of the brand, together with name, logo, graphic symbol, personality, and the slogans.

Silayoi & Speece (2004; 2007) divide package into two categories of elements: visual elements (graphics, colour, shape, and size) and informational elements (information provided and technology). According to Silayoi & Speece (2004) visual elements are related with affective aspect of consumer’s decision making process, while informational elements are related with cognitive one.

Summarising, two main blocks of package’s elements could be identified: visual and verbal elements. Relying on literature analysed graphic, colour, size, form, and material are considered as visual elements, while product information, producer, country-of-origin and brand are considered as verbal ones.

Research model. The performed literature analysis let us maintain that package could be treated as a set of various elements communicating different messages to a consumer. The type of message communicated depends on those elements. Visual elements of package transmit information which affects consumer’s emotions, while verbal elements transmit information which has an effect on consumer’s cognitive orientation (Silayoi & Speece, 2004). In such way, referring to Butkeviciene *et al.* (2008),

packaging sends to consumer valuable information about the product, helps positioning it in the mind of consumer and in this way has an impact on consumer's purchase decision. Based on theoretical studies of Silayoi & Speece (2004), Bloch (1995); Grossman & Wisenblit (1999), Butkeviciene *et al.* (2008) the research model (see Figure 1) was developed in order to reveal impact of visual and verbal package elements on consumer's purchase decisions. In this case graphic, colour, form, size, material are analysed as main visual elements, whereas product information, producer, country-of-origin and brand are treated as the main verbal elements of package.

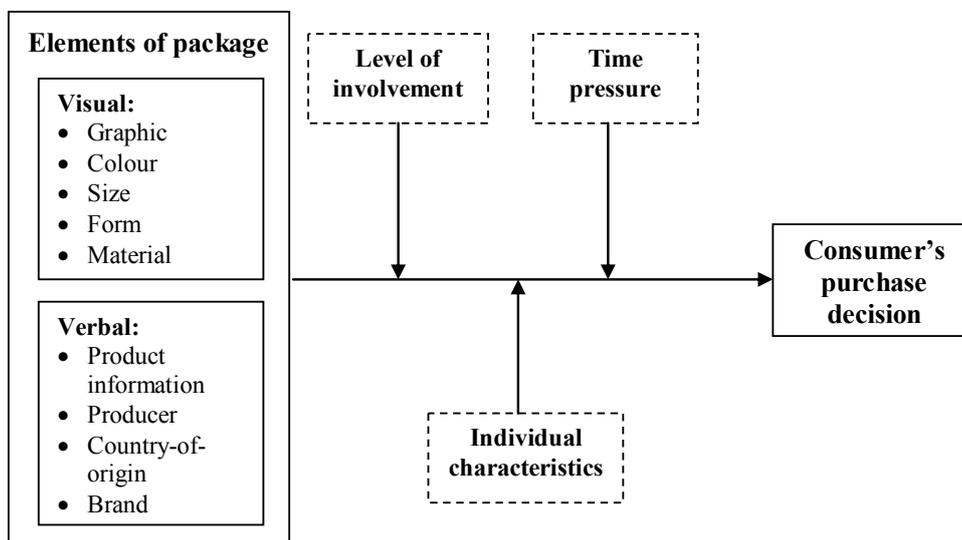


Figure 1. Research model

According to the literature analysed (see Silayoi & Speece, 2004, Grossman & Wisenblit, 1999, Butkeviciene *et al.*, 2008) the impact of package elements on consumers purchase decisions can be stronger or weaker depending on the consumer's *involvement level*, *time pressure* or *individual characteristics* of consumers.

The importance of consumer's involvement level for choice of products was confirmed by (Maiksteniene & Auruskeviciene, 2008) in their recent research. On the other hand, food and others FMCG usually are treated as low involvement products (Grossman & Wisenblit, 1999), however Silayoi & Speece (2004, p.611) referring to other researchers pointed out that some consumers may view food shopping not as a low involvement action. Supporting this point of view we maintain that consumers' involvement in purchasing convenience goods (food and other FMCG) can vary from low to high level, depending on particular consumer. It should be taken into consideration that pattern of consumers behaviour is changing due to increasing role of ecology, rising interest in a healthy lifestyle. Basing on literature analysis performed it could be confirmed that visual elements of package have stronger effect on consumers when they are in the level of „*low involvement*“, in contrast to those who are in „*high involvement*“ level. Conversely, verbal elements of package have stronger effect on those consumers who are in the level of „*high involvement*“. In the latter situation consumer show more interest in product and its package, taking into consideration information about product, expressing loyalty to a particular brand, etc.

Also with reference to the results of the researches of Silayoi & Speece (2004), Butkeviciene *et al.* (2008) it was assumed that *time pressure* is another important factor which influence the impact of visual and verbal package elements on consumer's purchase decision. According to the results of previous researches it was assumed that visual elements of package have stronger influence on product selection when consumers are under time pressure and, conversely, when consumers are not under time pressure, verbal elements of package have stronger influence.

Besides, referring to Bloch (1995), Silayoi & Speece (2007), we propose that package influences consumer's buying behaviour depending on his /her *individual characteristics*. The role of gender and age for the wine buying decision was investigated by Barber, Almanza & Donovan (2006). In this paper it was decided to deal with the gender, age, education and occupation in order to reveal influence of individual characteristics of consumer when making purchase decision for convenience goods that were selected for empirical research.

Research design

The type of descriptive research was chosen after taking into account the research problem, aim of paper and the requirements for information needed. In order to reveal the most important elements of package for consumer’s purchase decision the quantitative method employing personal (direct) survey was selected. This method also eliminates the problem related with return rate of the questionnaires. The research was performed in April of 2008 in Kėdainiai city. Non-probability sampling method was chosen, surveying 200 respondents representing various demographic groups.

In order to reach the purpose of empirical research – to determine elements of package having the biggest impact on consumer’s purchase decision – the questionnaires were developed providing questions to reveal the importance of various elements of milk and washing-powder packages. Milk and washing-powder were chosen as two different products from the group of convenience goods. Questions about package’s elements were developed with reference to the theoretical studies performed and research model developed (see Figure 1).

Analysing results of the research statistical data analysis has been performed, using statistical data analysis package SPSS 14.0.

Research results and interpretation

Research results are presented in following order: at first, with the introduction question consumers’ perceptions about package and its functions are clarified; second, the importance of various visual and verbal elements of package when making purchase decision is presented; third, the impact of package elements on consumers purchase decisions depending on the consumer’s involvement level, time pressure or individual characteristics of consumers are presented.

Analysis of the research results showed that respondents view package as a tool to protect product (26.94 percent.), to ensure convenience for product usage and storing (26.20 percent) and to transfer information about product and its characteristics (25.46 percent). Meanwhile such functions of package as attraction attention of consumer and stimulation his buying behaviour (11.99 percent.), identification of product (5.17 percent.) and promotion of it (4.24 percent.) were considered of lower importance.

Pursuing the aim of this paper, the importance of various visual and verbal elements of package for consumer’s decision to buy milk and washing-powder was analysed. The illustration of the results of this analysis is presented in Figure 2.

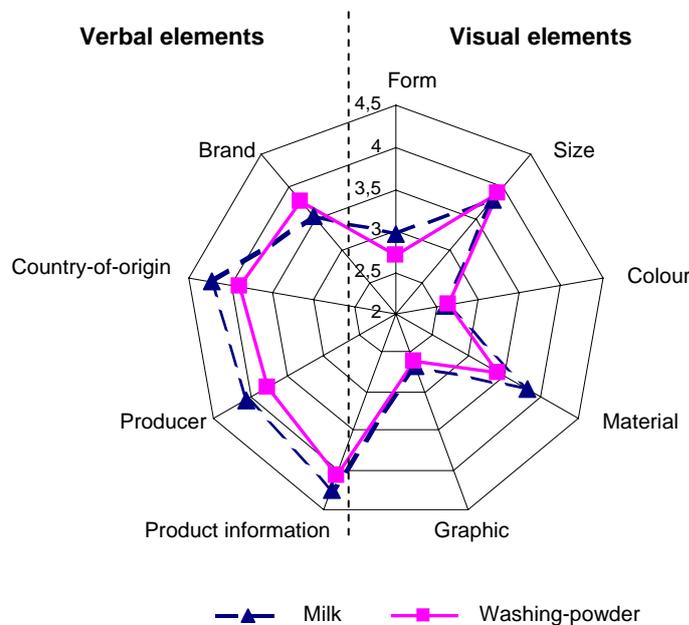


Figure 2. An impact of visual and verbal elements of package on consumer’s purchase decision

A separate analysis of visual and verbal elements of package let us maintain that package size and its material are the most important visual elements for purchasing both milk (size and material 3.80) and washing-powder (resp.: 3.87 and 3.41); whereas, in this case form, colour and graphic could be treated as unimportant elements of package. When analysing importance of verbal elements, it could be stated that product information (4.24 for milk and 4.06 for washing-powder) and country-of-origin (resp.: 4.22 and 3.88) are the most important elements. Furthermore its worth to add, that producer and brand couldn't be underestimated too, because the importance of both of these elements is treated by customers above the average.

Comparing the impact of visual and verbal elements of package on consumer's purchase decision it could be stated that verbal elements are more important than visual ones, when purchasing both milk and washing-powder.

According to the research model developed the impact of package's elements on consumer's purchase decision depending on time pressure, consumer's involvement level and individual characteristics were analysed.

The research results reveal that when consumers are under *time pressure* the verbal elements are still more important than visual ones. It emerged that even being under time pressure major part of respondents are interested information provided by package. 70.5 percent of milk buyers and 60.5 percent of washing-powder buyers are influenced by verbal elements as opposed to visual ones. It contradicts to the results of theoretical studies and to the assumption that when consumer experiences lack of time the visual elements come to the front, because at that point consumers haven't enough time for studying information. Such the results may be affected by decision to include a brand in the block of verbal elements of package. Inherently brand could be treated being visual element as well as verbal. These results should be taken into consideration for other researches in this field. On the other hand such results correspond to Young (2006) proposition about the effect of brand then judging the impact of packaging on consumer's purchase decision.

Analysing the impact of package elements on consumer's purchase decision, depending on the involvement level, at first, *involvement level* of respondents were determined (according to their preferences to price, package design, information provided and a way of making a package). Research results revealed that 53.5 percent of milk consumer's and 57.5 percent of washing-powder consumers could be treated as "low involved". This means that 46.5 percent and 42.5 percent respectively could be treated as "high involved" then purchasing milk and washing-powder. The results of the investigation of the importance of elements of package depending on the consumer's level of involvement are presented in Figure 3.

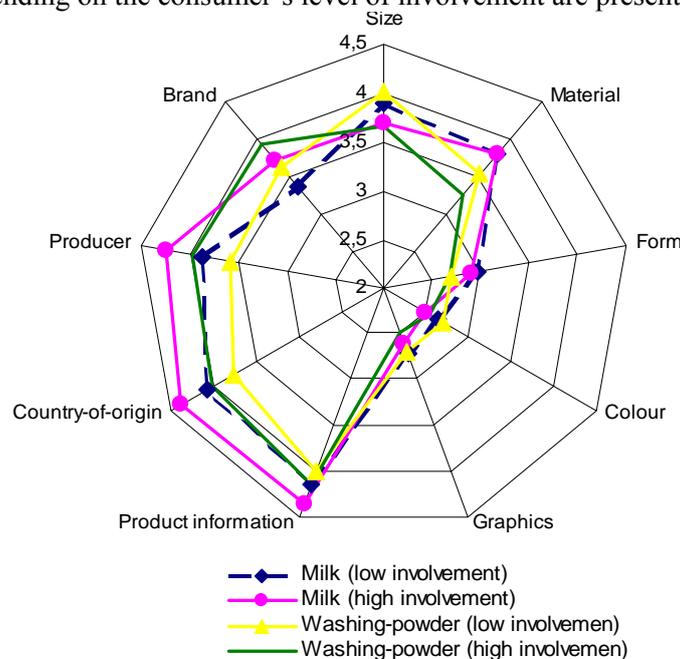


Figure 3. An importance of elements of package depending on the level of involvement

It was found out that the results correspond with those of theoretical studies and let us stating that visual elements of package have relatively stronger influence on consumer's purchasing milk and washing-powder when they are in the level of "low involvement", in opposite to those who are in the level of "high involvement". Meanwhile verbal elements of package have relatively stronger influence when consumers are in the level of "high involvement" and the relatively weaker influence when consumers are in the level of "low involvement. It is worth to mention that overall judgement about importance of verbal elements remains the same: the importance of those elements is higher comparing to visual elements.

Analysing individual characteristics of consumer's and their influence on impact of package on consumer's purchase decision it was revealed that there are more similarities than differences among various groups of consumer's classifying them according to their individual characteristics.

Verbal elements of package are the most important elements for both women and men, and especially product information (4.27 – 4.14 for milk and 4.08 – 3.95 for washing-powder) and country-of-origin (resp.: 4.22 – 4.19 and 3.87 – 3.91). Analysing impact of visual elements it was revealed that for both man and women the most important visual elements are size (3.60 – 3.85 for milk and 3.53 – 3.96 for washing-powder) and material (resp.: 3.67 – 3.83; 3.35 – 3.43), but for women visual elements are more important comparing with men.

Analysing the influence of age for importance of package elements it was found out that for respondents under 25 years old more important comparing with other age groups is package size. For 26-35 years old respondents' colour, material and product information, when buying milk and form and producer when buying washing-powder, are more important than for others; while for 36-45 years old group more important elements are form, graphics, producer when buying milk and product information, brand, when buying washing-powder, and country-of-origin for both products. For respondents of group 46-60 years more important is brand, when buying milk, and colour, material and graphics when buying washing-powder.

After analysis of the influence of education and occupation on consumer's purchasing it was noticed that verbal elements are most important for respondents having higher education and for full time workers.

Conclusions

Results of theoretical and empirical research of package elements and their impact on consumer's purchase decision stipulated following conclusions:

- Package could be treated as one of most valuable tool in today's marketing communications, necessitating more detail analysis of its elements and an impact of those elements on consumers buying behaviour.
- The impact of package and its elements on consumer's purchase decision can be revealed by analysing an importance of its separate elements for consumer's choice. For this purpose two main blocks of package's elements could be identified: visual and verbal elements, where graphic, colour, size, form, and material are considered as visual elements, while product information, producer, country-of-origin and brand are considered as verbal ones. Moreover, the impact of package elements on consumers purchase decisions should be evaluated depending on the consumer's involvement level, time pressure or individual characteristics of consumers.
- Empirically testing the research model proposed, package elements having the ultimate effect on consumer choice in a case of different products from group of convenience goods were determined:
 - It was revealed that verbal elements of package are the most important for consumer's purchase decision. For a major part of consumers' a size and material are the main visual elements, while product information and country-of-origin are the main verbal elements when purchasing milk and washing-powder.
 - The research results revealed that when consumers are under time pressure the verbal elements are still more important than visual ones. These results contradict to theoretical studies and to the assumption that when consumer experiences lack of time the visual elements are more important. So further analysis on this issue would be purposeful.
 - Results of analysing the impact of package elements on consumers purchase decisions depending on level of involvement correspond with those of theoretical studies and let us stating that visual elements of package have relatively stronger influence on consumer's purchasing when they are in the level of "low involvement", in opposite to those who are in the level of "high involvement".

Summarising, it could be stated that detail evaluation of verbal and visual package elements and their impact on consumer's purchase decision, taking into consideration involvement level, time pressure or individual characteristics of consumers, is necessary in order to implement efficient packaging decisions.

References

1. Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 23(2), 100-112.
2. Barber, N., Almanza, B.A., & Donovan, J.R. (2006). Motivational factors of gender, income and age on selecting a bottle of wine. *International Journal of Wine Marketing*, 18 (3), 218-232.
3. Bloch, P. H. (1995). Seeking the ideal form: product design and consumer response. *Journal of Marketing*, 59 (July), 16-29.
4. Butkeviciene, V., J. Stravinskiene and A. Rutelione (2008). 'Impact of consumer package communication on consumer decision making process', *Inzinerine Ekonomika-Engineering Economics*(1), pp. 57-65.
5. Gonzalez M. P., Thorhsbury S., & Twede D. (2007). Packaging as a tool for product development: Communicating value to consumers. *Journal of Food Distribution Research*, 38 (1), 61-66.
6. Grossman, R. P., & Wisenblit, J. Z. (1999). What we know about consumers' color choices. *Journal of Marketing Practice: Applied Marketing Science*, 5 (3), 78-88.
7. Keller, K. L. (2003). *Strategic brand management: Building, measuring and managing brand equity*, 2nd ed., Englewood Cliffs, NJ: Prentice-Hall.
8. Kotler, Ph. (2003) *Marketing management*, 9th ed. Upper Saddle River: Prentice-Hall.
9. Kuvykaite, R. (2001). *Gaminio marketingas*. Kaunas: Technologija.
10. Madden, T. J., Hewett, K., & Roth, M. S. (2000). Managing images in different cultures: A cross-national study of color meanings and preferences. *Journal of International Marketing*, 8(4), 90-107.
11. Maiksteniene, K. and V. Auruskeviciene (2008). 'Manufacturer and retailer brand acceptance under different levels of purchase involvement', *Inzinerine Ekonomika-Engineering Economics*(1), pp. 90-96.
12. nd labelling in marketing communications. *British Food Journal*, 100 (2), 110-118.
13. Prendergast, G.; Pitt, L. (1996). Packaging, marketing, logistics and the environment: are there trade-offs? *International Journal of Physical Distribution & Logistics Management*, 26 (6), 60-72.
14. Rettie, R., & Brewer, C. (2000). The verbal and visual components of package design. *Journal of Product Brand Management*, 9 (1), 56-70.
15. Rundh, B. (2005). The multi-faceted dimension of packaging. *British Food Journal*, 107 (9), 670-684.
16. Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British Food Journal*, 106 (8), 607-628.
17. Silayoi, P., & Speece, M. (2007) The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*, 41 (11/12), 1495-1517.
18. Smith, P., & Taylor, J. (2004). *Marketing communications: an integrated approach* (4th edition). London: Kogan Page.
19. Sogn-Grundvag, G., & Østli, J. (2009). Consumer evaluation of unbranded and unlabelled food products: the case of bacalhau. *European Journal of Marketing*, 43 (1/2), 213-228.
20. Underwood, R. L. (2003). The communicative power of product packaging: creating brand identity via lived and mediated experience. *Journal of Marketing Theory and Practice*, Winter, 62-76.
21. Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: attentional effects of product imagery. *Journal of Product & Brand Management*, 10 (7), 403-422.
22. Vazquez, D., Bruce, M., & Studd, R. (2003). A case study exploring the packaging design management process within a UK food retailer. *British Food Journal*, 105 (9), 602-617.
23. Vila, N., & Ampuero, O. (2007). The role of packaging in positioning an orange juice. *Journal of Food Products Marketing*, 13 (3), 21-48.
24. Wells, L. E., Farley, H., & Armstrong, G. A. (2007). The importance of packaging design for own-label food brands. *International Journal of Retail & Distribution Management*, 35 (9), 677-690.
25. Young, S. (2006). Measuring success: Using consumer research to document the value of package design. *Design management review*, 17 (2), 60-65.

DOI: 10.5755/j01.em.1.14.9405