

Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 156 (2014) 468 – 472

Procedia
Social and Behavioral Sciences

19th International Scientific Conference; Economics and Management 2014, ICEM 2014, 23-25
April 2014, Riga, Latvia

What we know about consumers' color perception

Laimona Sliburyte^{a*}, Ilona Skeryte^b

^{a, b} *Kaunas University of Technology, K. Donelaičio g. 73, LT-44029 Kaunas, Lithuania*

Abstract

This research includes theoretical analysis of the problem and explores the peculiarities of the use of color in marketing. Our empirical research results presented in this paper revealed that color perception only partially depends on demographic factors, because color is perceived differently by people of different age, gender and education. The hypothesis that as to marketing solutions, color perception influence decision to buy thus increasing efficiency of marketing has been confirmed, because the empirical research results disclosed that using of color in product identifiers builds brand uniqueness, differentiates product, boosts competitive advantage, strengthens loyalty, drives sales up, shortens time until perception, prolongs time spent in the store, and increases intentions of repeat visits

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Peer-review under responsibility of the Kaunas University of Technology.

Keywords: Sensory marketing; color perception; color perception in marketing decisions.

1. Introduction

The modern society is society of consumers. The intensive nowadays globalization and competition regarding consumers make searching for alternative methods of influence of consumers. The immaterial and intangible elements of the product affect the consumers' buying decisions. The competitive fight obliges to use actively the marketing tools, which would create exclusivity, link with the consumer and recognition of brands. Some scientists argue that the classical marketing is not effective any more. The sensory marketing dictates the new concept in marketing. It suggests using all the human senses: sight, sound, smell, taste and touch. The sensory marketing is the innovative solution to create the emotional characteristics of the brand/product and to provide it with solid position

* Corresponding author. Tel.: +37037300586.
E-mail address: laimona.sliburyte@ktu.lt

in market, as well as to secure strong relations with a consumer (Hultén, 2011; Funk & Ndubisi, 2006; Kosslyn & Thompson, 2003).

The sensory marketing provides an excellent opportunity to use color as the tool to form the product's differentiation. The colors may create emotional connections resulting in differentiation of the products, acquired competitive advantage, reinforced loyalty, increased sales, shorter perception time of the brand mark, longer stay of consumers in the store, created positive emotions and relation with the consumer, encouragement to buy on impulse, and increased number of intentions to go shopping again. The scientists (Cian & Cervai, 2011; Kauppinen-Räsänen, & Luomala, 2010; Hultén, 2012; Leigh, Peters & Shelton, 2006) state that color is an inexpensive and effective tool used to create positive opinion of the consumers about the brand/product. The color psychology affects the human lives in many ways; however they often do not perceive the impact of selected colors for website, forms and packages, shop or office, when the marketing is being implemented or when the clothes for employees are selected. The color has a powerful impact on all the life aspects in the subconscious level. Even when no word is uttered, the understanding of meaning of colors in the business provides us with a priceless tool to obtain the best response to marketing and to create the successful business in the end.

The studies of the scientific literature (Kareklas, Brunel & Coulter, 2014; Labrecque, Patrick & Milne, 2013; Krishna & Schwarz, 2013; Balaji, Raghavan & Jha, 2011; Lindstrom, 2010) allow stating that the discussions on the element of sensory marketing – color, are still very few in the marketing literature. This shortage is especially felt in the Lithuanian market. There is not enough systemized information about usage of colors in the Lithuanian market, and as we know, the consumers' color perception depends on the culture a lot. The majority of researches conducted by the scientists regarding the color and its influence on people were done in the areas of medicine, psychology and others. There is lack of generalized material, where the information about color usage in marketing decisions would be stated systematically, and this allows formulating the research problem in question – how does the consumers' color perception influence the marketing decisions?

The object of the research – consumers' color perception in marketing decisions. The aim of the research is to investigate the color perception in marketing decisions. The tasks of the research:

- To research empirically the color perception and its dependence on three demographic factors: gender, age and education.
- To research empirically the expression of color perception in marketing decisions.

2. Method

The main purpose of the research was to investigate the color perception in marketing decisions. The methodological groundwork of the empirical study was formed of scientific research studies analysis in sensory marketing (Kareklas, Brunel & Coulter, 2014; Labrecque, Patrick & Milne, 2013; Krishna & Schwarz, 2013; Balaji, Raghavan & Jha, 2011; Lindstrom, 2010). Performing the research was decided to collect primary data because they convey the best information for us. We collected data by the primary quantitative research using the survey. We collected information using questionnaire that had to be filled in by a respondent. We were able to formulate more objective conclusions appealing to the data collected through this way because there was no influence of the researcher to the respondents. The survey's questionnaire was designed by using the online system of survey creation www.manoapklausa.lt because of the provided technical possibilities to design questionnaires, convenience for respondents to answer and clear processing of results. The survey was confidential, while the respondents received reference to the surveys by e-mail, and published in several websites unifying various online communities. We gathered consumers' answers via sixteen open-ended and closed questions survey using a random sample of 429 respondents (N=260 men and N=169 women) from Lithuania.

In order to verify the theoretical insights there were developed and tested two hypotheses:

H1 The color perception depends on the demographic factors because people of different gender, age and education perceive color differently.

H2 The expression of color in marketing decisions influences the consumer's decision making to buy a product.

For the data analysis there was applied statistical package SPSS 19.0 version. The data were analyzed using the statistical method that examines the correlation of characteristics – principle of correlation. The correlation analysis examines the strength of links between the variables. The relation determined during the correlation analysis may be

interpreted as measure of association or connection and not as causality, because correlative relations do not show, which characteristic is cause and which consequence is. The dependency of variables was testified by the encountered statistically significant relations. The following non-parametric data criteria were used for data analysis: χ^2 criterion that shows whether there exists the significant difference between the groups according to the percentage distribution, and Friedman criterion that shows, whether the means of variables differ a lot when more than two variables are compared.

3. Results

The empirical research was used to learn, how the favoritism of colors depends on the gender, age and education of respondents. According to the research results, the favorable color of the consumers does not depend on their age or education. However, it was learnt that the favorite colors are predetermined by gender. For example, the female respondents indicated white, blue and green as their favorite color much more statistically significantly frequently, while the men preferred red more often than women.

The research results revealed that the calmness is usually related to blue, love to red, summer to yellow, nature to green, cleanliness to white, and elegance to black color. The positive emotions, such as prosperity, simplicity or optimism, were connected to some particular color the rarest. The consumers selected certain colors more often to express negative associations. Black and blue colors were associated with depression the most frequently; the evil was associated with black, danger and fire with red, fraud, jealousy with green, greed with yellow, cold with white, and death with black color. It can be noticed that black was associated with negative emotions more often, while red and blue were linked to anger, fear, sadness and disgust. The white, green and yellow colors, though, were associated with positive emotions (curiosity, hope, joy).

Only the single cases of linkage of colors with associations and emotions depended statistically significantly on the age ($\chi^2 = 7.85$, $p = 0.249$) and education ($\chi^2 = 4.37$, $p = 0.626$) of respondents, while the gender ($\chi^2 = 16.44$, $p = 0.036$) had more influence.

Thus to generalize these results, it is possible to state that H1 (The color perception depends on the demographic factors because people of different gender, age and education perceive color differently) was supported only partially.

The assessment of the respondents of the factors important to them and determining choice of the products was analyzed in the research next. The respondents were asked to assess the main identification elements of the product, which were analyzed theoretically: package, advertisement, shopping place. The purpose was to learn the significance of the color as element of sensory marketing. According to the research results, when the packed product is selected, the consumers are the most interested in the smell of package (3.48) and its material, while the size and form play the minor role. The predominant interior colors (3.56) and style (3.58), as well as predominant smell (4.06), are the most important things for the consumers in shopping place, whereas the music playing in the shopping place does not seem so relevant (3.26). The advertised product (4.14) and story (4.01) are the most significant for advertisement, while the predominant colors (3.28) and music (3.46) do not play a critical role. Although the color was not predominant among the answers, but its evaluation was always above the average in the evaluation scale from 1 to 5, which means that the color affects advertisements, package and shopping place.

In order to learn whether the color can define the product's smell the respondents were given similar pendants-air fresheners of different colors. They were asked to name, which one smelled strawberries. The results revealed that the ability to recognize particular smell was affected by hints in the environment, for example, color, because the absolute majority (97 per cent) associated the smell of strawberries with red color of these berries.

In order to learn whether the color may influence the consumer's perception about the product's price and quality, the respondents were given the phones of different colors and asked to select the one, which in their opinion, was the most expensive. The results revealed that a little more than half of respondents (55 per cent) decided that the phone's price did not depend on its color; however, another big part of consumers (36 per cent) tended to think that the phone of certain color cost more. So it is possible to state that the color announces about the product's characteristics and thus affects the perception of price and quality. Although all the colors presented to the respondents can be attributed

to the colors of luxurious goods, but the theoretical stereotype was confirmed that the golden color (36 per cent) is often related to the goods of high quality and price by the consumers.

So H2 that the expression of color in marketing decisions affects the consumer's decision to buy and thus increases the marketing's effectiveness was fully supported, because the research results revealed that the usage of color in marketing decisions forms the differentiation of the brand, the products differentiation, it increases the competitive advantage, strengthens consumer loyalty, increases sales, shortens the perception time, makes the stay in shopping place longer, and increases the probability to revisit store.

4. Conclusions

The analysis carried out and presented in this paper shows that colour as a component of sensory marketing is still inadequately discussed in literature of marketing. This inadequacy is particularly felt in the Lithuanian market. There is not enough structured information on use of colours in marketing in the Lithuanian market, although it is a widely acknowledged fact that color perception greatly depends on culture, therefore a wrong choice of colour may lead to failure of marketing solutions.

The carried out theoretical analysis of the issue, which is presented in this paper, reveals that there are great opportunities to use colour as a tool of sensory marketing for building product uniqueness. Colours can establish emotional links the outcome of which may be: product differentiation, gained competitive advantage, increased loyalty, boosted sales, shorter time until perception, prolonged time spent in the store, positive emotions and customer relationship, impulse buy temptation, increased intentions of repeat visits. Scientists propose that color is an inexpensive yet efficient tool to spread positive opinion among consumers on a brand.

According to the results of our empirical research, the consumers' color perception depends on the demographical factors, although not in all the cases, because people of different age, gender and education perceive color differently. Thus it is considered that if the marketing specialists want to be one step ahead, they should analyze the schemes of colors and to determine the accurate demographic characteristics of the consumer, to whom they are oriented. This information may determine what color/colors will be used for brand/product. The results of the empirical research showed that the consumers' color perception in marketing decisions may affect their buying decisions, thus it is considered that it is meaningful and even necessary to differentiate the product, to increase the competitive advantage, to strengthen loyalty, and to increase sales in order to form the distinctiveness of the trademark. According to the done analysis, the color in sales announces about the product's characteristics, and in case of food, the visible color even indicates taste. Besides, the colors are regarded differently in the areas of food products, services, technologies and finances. Therefore it is believed that it would be useful to conduct more researches in order to analyze, how the colors are perceived with regard to products of different categories.

References

- Balaji, M. S., Raghavan, S., & Jha, S. (2011). Role of tactile and visual inputs in product evaluation: a multisensory perspective. *Asia Pacific Journal of Marketing and Logistics*, 23, 513-530.
- Cian, L., & Cervai, S. (2011). The Multi-Sensory Sort (MuSeS): A new projective technique to investigate and improve the brand image. *Qualitative Market Research: An International Journal*, 14, 138-159.
- Hultén, B. (2011). Sensory marketing: the multi-sensory brand-experience concept. *European Business Review*, 23, 256-273.
- Funk, D., & Ndubisi, N. O. (2006). Colour and product choice: a study of gender roles. *Management research news*, 29, 41-52.
- Hultén, B. (2012). Sensory cues and shoppers' touching behaviour: the case of IKEA. *International Journal of Retail & Distribution Management*, 40, 273-289.
- Kareklas, I., Brunel, F. F., & Coulter, R. A. (2014). Judgment is not color blind: The impact of automatic color preference on product and advertising preferences. *Journal of Consumer Psychology*, 24, 87-95.
- Kosslyn, S. M., & Thompson, W. L. (2003). When is early visual cortex activated during visual-mental imagery? Theory and meta-analysis. *Psychological Bulletin*, 129, 723-746.
- Krishna A., & Schwarz N. (2013). Sensory marketing, embodiment, and grounded cognition: A review and introduction. *Journal of Consumer Psychology*, In Press, Corrected Proof.
- Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The marketers' prismatic palette: A review of color research and future directions. *Psychology & Marketing*, 30, 187-202.
- Lindstrom, M. (2010). *Brand Sense: Sensory Secrets Behind the Stuff We Buy*. Free Press.

- Kauppinen-Räsänen, H., & Luomala, H. T. (2010). Exploring consumers' product-specific colour meanings. *Qualitative Market Research: An International Journal*, *13*, 287-308.
- Leigh, T. W., Peters, C., & Shelton, J. (2006). The consumer quest for authenticity: the multiplicity of meanings within the MG subculture of consumption. *Journal of the Academy of Marketing Science*, *34*, 481-493.