Influence of Color Perception on Consumer Behavior

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Abstract. With the intensified competition, attracting and retaining the customers has become a top concern for businesses. Color has been identified as one of most significant factors influencing consumers' purchasing behavior. The purpose of the research is to explore the ways color perceptions influence consumer behavior. A better understanding of influence of color perceptions enables them to direct marketing strategies design and implementation. In the research, the researcher makes an attempt to review relevant research papers and account for why color is important in capturing the interest of consumers. In the paper, consumer behaviors, influential factors and influence of colors on consumer behavior, color meanings and roles are reviewed and critically discussed. It is expected that the study can help better understand consumers' color perceptions and their potential influence on consumer behavior. The color psychology has become growingly significant in producing and packaging products. Colors, thus, accomplished prominence in marketing activities. The findings in the established literature can offer some great implications for businesses in terms of how to leverage color for creating distinct customer experience. The established literature also highlights colors have different meanings in different culture. That indicates the importance of considering cultural difference when exploring influence of color perceptions on consumer behaviors. The paper simply reviews the established literature, and these established findings remain to be empirically tested.

Keywords: Color · Color perceptions · Consumer behavior

1 Introduction

In the modern society, consumers dominate. The intensified globalization and competition prompts businesses to seek for alternative approaches to influencing consumers. Immaterial and intangible features of products influence consumers' purchasing decisions. Sensory marketing, under such circumstance, has become an innovative solution to generate emotional features of brand/product and capture strong relationship with consumers (Hultén 2011). The sensory marketing offers an excellent opportunity for using color as an approach to differentiate one product from another. Color may generate emotional link leading to product differentiation, competitiveness, strengthened customer loyalty, increased sales, reduced perception time for the brand, enhanced positive emotions and customer relationship (Aghdaie and Honari 2014).

The researchers such as Cian and Cervai (2011); Kauppinen-Räisänen and Luomala (2010) argued that color is a cost-saving and effective approach to generate consumers' positive opinions. Color psychology is found to significantly influence human beings' lives in a variety of approaches. Many organizations worldwide have recruited color consultants to help figure out the best color for products so as to best capture consumers. It was found that 62–90% of purchasing decision was based on product color (Singh 2006). However, the established researches into color and its influence (Kareklas et al. 2014; Labrecque et al. 2013) are few. Little has been understood about the influence of color perception on consumer behavior. There is death of generalized material, in which information about color use in marketing would be explained in a systematic way. That allows the formulation of the research problem, "how does color perception influence consumer behavior?"

2   Consumer Behavior

According to Blackwell et al. (2006), consumer behavior refers to activities including obtaining products or service, consumption and product disposal. In marketing field, consumer behavior has captured interest of market-oriented marketers as it investigates into the ways consumers purchase and why they purchase. With insights into consumption behavior, marketers are capable of developing strategies for influencing consumers' purchasing behavior. Marketing activities no more flow from marketers to consumers. Instead, it is important for marketers to truly learn the ways consumers react to marketing efforts. Evans et al. (2006) develop model known as hierarchy of communication effects model, including seven stages, "exposure, attention, perception, learning, attitude, action, and post-purchase". Nevertheless, as other business model, it is unnecessary consumers observe sequence in the process of purchasing. However, the model offers marketers logical model for integrating psychological concepts into interpretation of why and how consumers react to marketing activities (Evans et al. 2006) (Fig. 1).

Fig. 1. Sequential effects of response to marketing (Evans et al. 2006)

3   Color

Color is differentiated in hue, brightness and saturation (Ogden et al. 2010). In terms of hue, colors can be categorized into cool color (e.g. orange and red) and warm color (e.g. violet, blue). Brightness and saturation are significant in color perception. Brightness plays an important role in determining lightness or darkness of color; saturation suggests purity of color. It was found that color is much more pleasant with enhanced attributes (Camgöz et al. 2002). According to Hemphill (1996), bright colors are linked with positive emotions like happiness, joy and hope. Likewise, Elliot and

Maier (2007) considers brighter colors as friendly, cultured, pleasant and beautiful. Conversely, dark color is associated with negative emotions like boredom and sadness (Camgöz et al. 2002). According to Elliot and Maier (2007), color may generate associations and responses, and they take meaning of color as bipartite. Meanings of colors are triggered by learned associations or shaped by the nature. Likewise, Tofle et al. (2004) also claimed emotional responses evoked by color as an outcome of learned associations on basis of culture and individual-related features. Cherry (2015) explores link between color and mood. Cool colors are linked with the moods as calm, serene and comfort. Conversely, arm colors are relevant to stressful and exciting moods. Furthermore, Valdez and Mehrabian (1994) confirms long-wave length color as much more arousing the short-wave length ones. Colors are capable of attracting attention. That indicates retailers are capable of leveraging color to elicit appropriate behaviors. Bellizzi and Hite (1992) identified people had higher willingness to stay and purchase products in environment with blue than environment with red.

In some case, "meaning" may represent a kind of mental stimulation (Osgood et al. 1957). Seahwa (2014) definitions colour meaning in her research: "Colour meaning is not about combinations that create pleasing responses (colour harmony), not about the processes with which people understand and react to colour (colour perception), and not about liking a particular colour among alternatives (colour preference). Instead, it is concerned with the meanings that are associated with certain colours."

The meanings linked with colors are different in different cultures. No absolute universal meanings are given to specific color. The most widely known studies on the feelings that different colors represent are mainly located in the context of North America. With expansion of North American culture, interpreting color meanings worldwide have been alternated and shown tendency of convergence. The color meanings identified in North America are presented in Table 1.

In addition to influence of culture, colors are different because of dependence on lighting conditions, observation position and surrounding especially the adjacent color. All these factors can shape the ways of perceiving a specific color. Moreover, even when people are exposed to the same color, the ways they perceive color, meanings and emotions incurred by the same color are different among people due to gender, age, educational and culture, childhood association and others (Scott-Kemmis 2013). A research by Choungourian (1969) into people from four countries identified variance in color preferences represents individual variation. It was found that the US consumers prefer red and blue, but least like blue-green. However, respondents from Iran and Kuwait preferred blue and green. As for gender, women tended to have different color preferences from men. Besides, many men in the western countries are red/green color blind, but marketers can use unisex colors like blue, red, black and white. There is a trend of shifting from bright and primary colors toward sophisticated color in form of patterns. Adults were found to be less open to experiment of new colors, but they adhered to the favorite color for lowing the risks. Regarding education, well-educated people are found to be much more complicated in color choice.

Table 1. Different colors and meanings (adapted from Scott-Kemmis 2013)

Color	Represent	Effects
Red	Energy, action, desire, low, passion	Stimulating, exciting, motivating, attention-capturing, assertive, aggressive
Orange	Adventure and risk taking; Social communication, interaction, friendship	Enthusiasm, rejuvenation, Simulation, courage, vitality , fun, playful
Yellow	Mind, intellectual; happiness and fun, communication of new ideas	Creative, quick decisions; anxiety; Producing; critical; non-emotional ; Light, warmth motivation
Green	Harmony, balance, growth, hope, wealth, health, prestige Serenity	Rejuvenation, nurturing; dependable Agreeable diplomatic, possessiveness; envy
Blue	Communication, peace and calm; honesty, authority, religion, wisdom	Conservative; Predictable; Trustworthy, trustworthy, secure, responsible
Purple	Inspiration; imagination, royalty, mystery, nostalgia, individuality	dignity Empathy ; controlled emotions Impractical Respectable
Pink	Unconditional love; compassion; nurturing; hope, girlish	Calming; non-threatening; Affectionate
Gray	Neutrality; compromise, control	Indecision, detached, depression, unemotional
White	Innocent, pure, new beginning, equal, unity, fairness	Impartial; rescuers, futuristic, clean, efficient, soft noble
Black	Black mystery; power and control; prestige; value; timelessness; sophisticated Formal, dignified and sophisticated	Formal, dignified and sophisticated Depressing Pessimistic

4   Roles of Color in Consumer Behavior

The established literature has been dedicated to exploring the relationship between colors and purchasing behaviors. It is found that packaging and color significantly and directly influence consumers' psyche (Raheem et al. 2014). Thus, it is significant to carry out the studies on relationship between colors and consumer behavior so as to distinguish color that mostly influence positively or negatively influence consumers' choice and thereby purchasing behavior. Brody et al. (1981), television advertising significantly influenced children consumerism. Thus, children without knowledge of substantial components may be fascinated by colors. That indicates advertising with good color was likely to attract children and purchasers. Color is taken as an important non-verbal sign in understanding consumer behavior (Kotler and Keller 2006). Consumers generally link specific color with specific product categories by understanding dependencies among different colors. Especially, colors play important in marketing and packing. Harmony, proper arrangement of colors can help to capture consumers' interest. A major factor influencing consumer perception is the type of color adopted in packaging. It is the color that captures consumers' attention (Hagtvedt 2016). Consumers get color of specific products on basis of relations they build up. on some occasions, having pleasant experience may result in favor of a specific color, and on other occasions consumers may acquire color on basis of relations (Luscher and Scott 2003).

Color is expected to be helpful for capturing consumers' attention as human beings are capable of quickly identifying colorful items. That is because the pre-attentive system of brain is designed and developed to easily spot color in the external environment, and what is more important sis that the system can immediately help select the items for following attentional processing. Nevertheless, color is not alone. In other words, it is hardly possible to perceive a specific color on its own, but a specific color is used with other adjacent colors. Therefore, adopting color for capturing consumers' interest may be inhibited by the surroundings where items with target colors are placed, and different colors have different values for capturing attention (Jansson-Boyd 2010). In addition, a recent research (Huang and Lu 2013) suggests that blue and red mediated the perception of healthiness perception of the food product.

Furthermore, relying on setting, a single color or combined color communicates symbolic meanings that can generate affective reactions and are adopted in marketing practices to figure out brands, categorize products, make assumptions and direct consumers' choices (Hanss et al. 2012). Ones' perception of color is based upon link between color and associated meanings. Consumer researches claim successful adoption of color significantly relies upon congruency between symbolic meanings of color and product attributes. Bottomley and Doyle (2006) conduct a research into brand logo and they found that cool colors such as blue and green are proper for utilitarian products, and warm colors such as red and orange are proper for products or services generating hedonic experience.

5   Practical Implications

The established literature has highlighted two important themes. First, it is highlighted that human beings have continued to be influenced by color psychically or mentally. How human beings are influenced by colors has remarkably psychological essence that indirectly affects norms, responses and individual consumer's behavior (Elm 2012). Second, it is highlighted that in different countries or cultures, colors are possessed with different meanings. That offers implications that mistakes in selecting color may discourage people from purchasing specific products. Colors, thus, accomplished prominence in marketing activities. The findings in the established literature can offer some great implications for businesses in terms of how to leverage color for creating distinct customer experience.

First, the established literature implies that marketers need to learn emotions and needs generated by each color for leveraging color in marketing activities. A good understanding of meanings of different colors is the prerequisite to successful use of color. For instance, cool colors such as blue and green are associated with attribute "pacifying", and warm colors such as red and orange can stimulate interest. Thus, if a business intends to stimulate consumers' interest, it is desirable to use warm colors.

Second, it is implied that businesses should capitalize on color for creating the customer experience that they intend to deliver to the customers. For attracting consumers, color has been taken as critical element. Learning well psychological influence of colors and its variance combination can help marketers a lot. However, color selection should be congruent with the business. For instance, brown, a color with the impression of being dull, can generate great effect in coffee shops or bakeries to enhance customer experience. Likewise, UPS, the leading shipping company worldwide, is renowned for its brown trucks. That indicates there is no formula for how to use different colors in creating customer experience.

6   Conclusion

Overall, the established literature has identified the great impact of color perceptions on consumer behaviors. The color psychology has become growingly significant in producing and packaging products. Colors, thus, accomplished prominence in marketing activities. Color can stimulate interest and enhance desire for purchasing a specific product or service. With the intensified competition, attracting and retaining the customers has become a top concern for businesses. Color has been identified as one of most significant factors influencing consumers' purchasing behavior. Color in marketing directly influences consumer behavior, which has been confirmed by lots of researches. Considers link color with different products, which increases difficulties of learning the ways people respond to colors. Each color must be deployed for suitable product in line with psychological features. The color psychology has become growingly significant in producing and packaging products. The established literature also highlights colors have different meanings in different culture. That indicates the

importance of considering cultural difference when exploring influence of color perceptions on consumer behaviors. The paper simply reviews the established literature, and these established findings remain to be empirically tested.

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