

THE INFLUENCE OF PRODUCT COLOR ON BUYING DECISION PROCESS

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Abstract - This article deals with color as a decision element in the purchasing process. It was intended to realize something more about the existence or not of this influence. About 1500 people of both sexes were surveyed in different countries and at different ages and it was concluded that intersecting disciplines such as psychology, culture, marketing, neuroscience, geography have a common denominator to all of them - the color in the buying decision.

Keywords - Marketing, Color, Associations, Buying Decision, Consumer, Positioning, Neuroscience

I. INTRODUCTION

One of the central issues in marketing is delighting consumers and creating a lasting relationship with them, beyond mere circumstantial interaction. This implies that the consumer's approach to companies and products must be rational but also emotional. This attraction has to be real and strong enough for trust and loyalty to exist and be sustained over time. The main objective is to create a strong and lasting connection with the consumer. This is where colors come in, so it is a key piece to create the much desired connection with the consumer and arouse favorable emotions in him. Indeed, the right color can help to individualize the brand, differentiate products, increase competitiveness and the customer's confidence in the brand or product, making the customer loyal because it creates a link with the brand, which leads to it staying on the market longer (Laimona, and Ilona, 2014). The fundamental question that arises is how to draw consumer eyes to our product? In fact, it is through our senses that we perceive the world around us, and it is through them that we gain awareness of the companies, the offerings and brands associated with them.

II. THEORETICAL FRAMEWORK

Our purchasing decisions are driven by a kind of sensory marketing in which vision plays a fundamental and trusting role for consumers (Amsteus, et al., 2015). Recognizing that color is the most important element associated with vision (Amsteus, et al., 2015), we realize the importance of associating the study of color with marketing. Labrecque, Patrick and Milne (2013) underline this perspective considering that color contains predicates and can influence consumers' thoughts, feelings and behaviors. Likewise, color perception is one of the most important cognitive aspects of the human brain, leading not only to different activities, but also to stimulating it at different levels (Rakshiti and Lahiri, 2016), when interacting with the outside through websites, product packaging, store decor or other

physical spaces, employee clothing, nail color, lip color, etc. Thus, the analysis and understanding of human behavior in relation to the market and marketing of products or services can be done at the intersection between the study of consumer behavior and sensory marketing (Hulten, 2011) or cognitive neuroscience (Garcia and Saad, 2008), which when applied to marketing proposes to call neuromarketing. This, after all, comprises cognitive studies associated with awareness, attention, memory, decision processes, preferences, emotions, sensations, cultural impact and choice prediction (Ulman, Cakar, and Yildiz, 2015). This science emerges as an interesting alternative, as it attempts to analyze cognitive processes that also rely on irrational, intuitive, heuristic and / or affective processes, which traditional marketing methods (surveys, focus groups, for example) cannot measure (Stanton, Sinnott-Armstrong, and Huettel, 2017; Stasi et al., 2018), in which we may include the study of color and its impact on our brain and consequent biological behavior for purchase. On the other hand, some elements stand out in most authors' analysis of the relationship between buying behavior and color. They are: culture, gender, age and religion. There are actually different color clusters that vary depending on the culture of a country or region (Babolhavaeji, Vakilian and Slambolchi, 2015), but there are also colors that seem to have hegemony of results and opinions in almost every country. This is the case with blue. Blue is the color that gathers the most consensus among the authors as to the similarity of its meaning in the most diverse cultures, being universally accepted (Amsteus et al. 2015). Saad and Gill (2000) concluded that blue is indeed the preferred color of a larger number of crops, while yellow in general is their last preference. Regarding gender, Babolhavaeji, Vakilian and Slambolchi (2015) concluded that Men and Women do not accept colors in the same way and that the color relief can be so high that the color used in the packaging of a product that attracts a woman to the purchase of the same can cause revulsion in man and vice-versa. Basically, their study confirms that consumer

interests vary by gender, which is also revealed in color choices, with the recommended color for men-oriented products being blue and for women purple. If we want a product that is attractive to both sexes, blue and green are good options. Widening the impact of color on age, Sperdea and Criveanu (2014) systematize the relationship between different age groups and the taste for colors associated with their consumption behaviors. The first group analyzed is children, who claim to be a significant segment of consumers and who are greatly influenced by vivid and appealing colors such as red, yellow, orange, green, light blue. Thus children's toys, clothes and food are always bright and vivid. As for adolescents, they assume themselves as an important group of consumers, especially when they begin to have some autonomy. Teenagers prefer products and colors that emphasize their personality, using colors that are in "fashion", even if they are not their favorite. They use solid colors to draw attention and be clearly seen by others. As for adults, the largest consumer group, they have more stable and concretely defined consumer behavior and preferences. Not wanting to distinguish themselves excessively, they use colors appropriate to each occasion and place. Finally, the authors mention older people who have a strong emotional connection to long-standing products and show some resistance to new ideas and products. Preferred colors are neutrals and pastel colors, avoiding overly vivid colors (preferring gray, brown, black and white). In the same vein Singh and Srivastava (2011) concluded that women between 6 and 47 prefer warm tones and men cool tones, and as

they get older, both sexes lose interest in the intensity of colors, gaining interest in their colors shades. With regard to religion, Sperdea and Criveanu (2014) find associations of the red with Christianity, not only for Christmas, but with the blood of Christ and unconditional love, while white is closely associated with purity, innocence and peace. They also found associations of green, as the main color, with Islam. Green, assumed to be the Prophet Muhammad's favorite color, is the color used to represent Islam among other religions and can be seen in mosques and other important places. Another religion mentioned was Hinduism, where colors play a very important role, with a strong influence on consumer behavior. The most important colors are red associated with purity, sensuality and festive seasons such as weddings, births and festivals, and orange which is the most sacred color associated with fire, ambition and also purity. The last religion mentioned is Buddhism, where the emphasis is heavily on spiritual gains, rather than material ones, so it shies more away from consumption. In this religion red is the most sacred color and linked to the origin of life, and if associated with green symbolizes longevity.

That is, colors also have a psychological meaning to which feelings associated with both positive and negative are associated. Colors have the ability to trigger different reactions in people: red appeals to passion; blue for impulse buying; the green to low cost products; black is associated with sophistication / premium products, etc. (Fig. 1).

Colors	Associations	Colors	Associations
Blue	Loyalty, calm, serenity, trust, security and tranquility. Conservatism and responsibility. Not good for restoration because it decreases appetite.	Purple	Spirituality. Fantasy. Luxury. Extravagance. Stimulates creativity and problem solving. Suitable for beauty products.
Green	Nature, affection, harmony, balance, health, sustainability and tranquility. Stability. Dynamism. Very associated with the health sector and social solidarity institutions.	Black	Strength, sophistication, elegance, curiosity. Fear. Very associated with the male sector.
Red	Action, energy, power, passion and love. On the other hand, fear, aggression and danger. It stimulates urgency, so fast food chains love it. Suitable for sale actions, promotional campaigns, and ideal for compulsive consumers. As well as for companies that suggest speed and action.	White	Conservatism. Purity, harmony. Cleanliness, simplicity, elegance.
Orange	Energy, balance, enthusiasm and creativity. It stimulates the creative aspect. Effective in the catering, communication, travel and adventure sports sectors. Ideal for products with youthful spirit.	Turquoise	Creativity and versatility. Clarity of thought and communication. Ideal for teaching.
Yellow	Optimism, logic, appetite, transparency. Anxiety. Stimulates appetite and consumption. Effective in negotiations, and ideal for networkers, journalists, animators, teachers and artists.	Pink	Calm. Fashion, beauty. Feminine. Most associated with cosmetics and beauty and is also associated with cheap but modern products.
Gray	Conservatism, neutrality and reserve. Control. Professionalism. Knowledge. Associated with technology companies, with innovative and scientific products, finance, law and science.	Brown	Seriousness, nature, sophistication, safety and stability. Concentration and organization. Ideal for interior design.

Figure 1: Colors Associations
Source: Adapted from Heller (2014)

Based on the described above, we proceeded to a research paper on primary information search to establish the connection between the motivation for buying and colors, with the object the following two questions:

1. Upon the Act of purchasing, does the color of the product significantly influence your decision? If yes, why, and if no, why? (Question 1 - P1)
2. Which 4 colors encourage you to buy the most, and what associations do you choose from each of the positive colors, and which 4 colors least encourage you to buy and which associations Does each of these colors choose, negatively? (Question 2 - P2)

III. METHODOLOGY

A deductive, fundamentally qualitative and content-based methodology was used and a survey was conducted online for 1,500 people resident in the European Union, consisting of mostly open-ended

questions. People were randomly selected based on a probabilistic sample stratified by sex, age and geographical origin. About 50% of men and 50% of women, about 40% of young people under 30 and about 40% of individuals between 30 and 50 and 20% over 50. In addition, the sample was taken from 10 European Union countries, with about 50% of Mediterranean Europe - Portugal, Spain, France, Italy and Greece - and the other 50% from northern Europe: Germany, the Netherlands, Scandinavians and the United Kingdom. The response rate was above 60%, namely 954 respondents.

IV. RESULTS, DISCUSSION AND FUTURE INVESTIGATIONS

Below is the table with the results from the respondents to the online survey conducted for Question 1 (P1) regarding the characterization of those respondents who responded to the survey and the main reasons given for YES and NO.

Question 1	Total	Men	W	Up to 30 years	30-50 years	Over 50	Europe Southern	Europe Northern
YES	871	389	482	333	324	214	302	569
NO	83	56	27	15	31	37	60	23
Total	954	445	509	348	355	251	362	592

Table 1: Sample characterization of respondents according to age, geographical origin and gender

Question 1	Reasons
YES	Aesthetics; Good energy; Youthfulness; Good memories; “visually appealing”; Color means respect and care; Colors as a Godsend
NOT	Preference for taste or utility; color can be manipulated; color does not guarantee quality;

Table 2: Main reasons for the influence color has on the purchase decision

In the first analysis, some findings can be drawn from the results presented. First and foremost it seems to be clear that the consumer is influenced by color when proposing to buy a product. Secondly, the behavior of men and women is not equal in relation to color. Although both feel influenced by color, men are nonetheless less influenced than women, revealing that the impact of color on the buying decision has to do with gender corroborating the literature.

Thirdly, the results seem to point to a smaller influence of color on the increasingly advanced decision maker. It proves the theory that the impact of color also has to do with age, although in the literature less influence is not imperative as one gets older. This will be an area that will require more attention in future research. Fourthly, it seems that

consumers in southern Europe are less influenced by colors than those in northern Europe, which leaves room for further research, especially with the introduction of the culture factor, although once again the theory is proven as regards explanatory factor of geographical origin.

Additionally, table 2 reveals some of the reasons for the influence or not of color on the purchase decision, which also shows some corroboration with the literature as the main reasons for YES have much to do with values and emotions, while the reasons for NO are far more rational in nature. In fact the right color can help to individualize the brand, differentiate products, increase the competitiveness and trust that the customer sees in the brand or product, making the customer loyal because it creates a connection with the brand, which leads to it will remain in the market

longer. There are several examples of companies that change the design of their products (more rational component) but keep the same color (more emotional component). Indeed color can be a strong positioning tool. However, some answers contradict the literature, namely when some authors state that color can

convey quality and other attributes that some of these respondents denied.

On the other hand, Question 2 (P2) whose results are shown in the table below reveals the main colors and their associations made to those same colors, as they were answered with greater or lesser influence.

P2 (+)	Associations	P2(-)	Associations
Green	Nature; Ecology; Hope; Energy	Black	Sadness; Absence; Dirt; Dark
Blue	Tranquility; Future; Consensus	Brown	Little consensus; Clearance; Dirt
White	Purity; Aesthetics; Understanding; Cleaning	Purple	Rules; Dogmas; Longing
Black	Discretion; Sophistication; Bold	Red	Aggressive; Screaming; Vanity

Table 3: Main Colors and Their Associations

In a brief analysis we can point out that some findings are contradictory to each other, such as that concerning the black color, as it is simultaneously considered positively and negatively, dividing opinions, as the red that is typically referred to in literature as one of the strongest colors, we find it in our sample as less beneficial than other colors. Other findings seem evident as the fact that many of the associations have a religious component in their subconscious which reveals the strong influence of religion on color choice. "Positives" associate colors with much more forward-looking attributes, while others enhance colors with their most mysterious and obscure attributes.

Applying this study to a particular sector, such as food, for example, would certainly give us several other clues. In fact, the decision-making process for food choices is a highly complex phenomenon in which classical segmentation (sociodemographic, psychometric and preference reporting) does not allow it to be fully understood, so desire, emotion techniques such as neuro marketing, for example, can help to identify.

Food is a survival process, but inherent choices also have a hedonic and psychological component, for example, a food or meal may be associated with moments of pleasure and happiness or the opposite. In addition to the sensory attributes of the food (taste, smell, appearance, for example), additional information such as product packaging, communication and disposition are important factors in decision making due to the high accessibility to several products of the same category. For example, we can easily anticipated a sweet experience of a red packaged product and a healthy experience of a green packaged product (Wang, 2019). So, product packaging has been shown to play an important role in consumer communication, perception and

satisfaction as it conditions consumer perception of the product (Stasi etc., 2018), so these would be areas of fruitful future research.

V. CONCLUSION

In conclusion, companies in a competitive context such as those known are trying by all means to add value to their customers, primarily through their coupled products and / or services. One way to deliver value to customers is through the color that can be seen on a package, on a website, on the product itself or on physical evidence where the transaction occurs. Thus understanding the influence that color can have on the purchase decision process is to contribute to the better positioning of companies in their marketing strategies. Color can greatly contribute to this as it is a factor that can combine different disciplines such as psychology, culture (including religion and genre), geography, sensory marketing and neuromarketing, which allow us to understand the richness of this approach.

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