

Category: preliminary communication

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THE PSYCHOLOGICAL IMPACT OF COLORS IN MARKETING

Abstract:

The Psychology of color is a scientific discipline that studies the different emotional states, behavior and mood in humans, caused by the color action. Color as a valuable tool and an integral part of marketing communication directly affects our subconscious and attracts or rejects us with its hidden meaning. It is therefore very important to choose the right color which achieves communication with the consumer. Since the market is flooded with various products full of marketing messages, it is essential to make our product distinguish from the crowd.

Marketing experts affect consumer behavior with integrated marketing communication through various market research. Better position of a product in the market and increased profits, can be achieved by proper selection and combination of colors. The survey and statistical analysis of the data were conducted by using descriptive statistics.

Keywords:

psychological impact of colors; colors and marketing; integrated marketing communication; advertising

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Introduction

Colors dominate our lives and surround us. The meaning of colors for people begins with the birth and follows us throughout our lives.

The psychology of colors investigates colors and corresponding impact on people. Various research confirmed that people perceive colors differently. Colors have positive and negative meanings; therefore, it is important to choose a certain color for a certain situation. If a goal were to influence the on-line purchase decision, it would be wise to use red color on the corresponding web site. Namely, red triggers action and can therefore influence consumer-s behavior.

Color is a valuable tool, integral part of the marketing communication that sends a powerful message to consumers. The purpose of colors in marketing communication is to attract people-s attention and stay in conscious as long as possible. It is also very important to know for whom the product is intended. Marketing experts are familiar with the psychological influence of colors and corresponding influence on (our) subconscious consumer mechanisms. Approximately 90% of current, subconscious products judgments are based on colors [1]. Research showed that certain product purchase decisions are made within 90 seconds of product observation [1]. Due to the mentioned, marketing experts make us buy certain products by carefully choosing and combining colors while creating consumer behavior at the same time.

Marketing experts are very often misusing children vulnerability and their receptivity to adverts, while promoting certain products. Namely, majority of companies use popular cartoon characters in advertisements in order to attract children-s attention and influence their behavior. Marketing experts learned through time to think as children and to “approach” them the right way. In advertising various products for children,

characters from cartoon Frozen are currently being used the most. The mentioned has a very strong influence on children and (enhances) creates the necessity for the product. Color is also one of the key factors in packaging design. In order to improve sales, marketing experts have to carefully set the target group of consumers when they sell a certain product. Furthermore, it is also very important to take into consideration psychological meaning of a certain color and its impact on people.

Psychological meaning of colors

Color directly affects our subconscious, it attracts or rejects us. From a psychological point of view, a certain color has a different influence on each person, causing different emotional states, behaviors and moods. Close connection of colors to our psychological state tells much about ourselves. Some colors are accepted and desirable in different cultures while others are undesirable due to causing negative feelings or events. With their hidden meaning, colors convey a universal message that is above all racial, religious or sexual limitations [1,2].

The history of the psychology of colors

Long-term research show that color perception differs among people, influences emotional state, behavior and mood.

Aristotle was one of the founders of the theory of color perception in the fourth century B.C. He connected basic elements of fire, water, earth and air with certain colors. Aristotle-s principles of defining colors were used for two thousand years until the general theory of colors was set by Newton [3,4].

Hippocrates, for example, discovered that light red could have different impact on people compared to dark red. According to Hippocrates- theory, the impact of light and dark colors is different. By concluding that colors could be used

therapeutically, he set the basics of modern medicine. Combining power of colors, music and plants Paracelsus “renewed” philosophy of colors and used it in healing [5].

Sir Isaac Newton set the theory of colors in 1672. According to Newton, colors are related to light. In his experiment, Newton noticed that by releasing white light through optical prism light breaks to components [6]. White light, heterogenic mixture of various types of beams decomposes into differently colored beams called “color spectrum” by breaking in a prism. Every color in a spectrum is more or less breakable depending on position. The least breakable color in a spectrum is red with maximum wavelength [6]. White sunlight is the sum of all spectrum colors. Spectrum of colors consists of seven colors: red, orange, yellow, green, blue, indigo and purple. Every spectral color with a certain wavelength and color spectrum is continuous - from blue purple to orange. He described light as electromagnetic occurrence, while first circle diagram was developed in 1666 [7,8].

Primary colors of the Newton system are red, yellow and blue. Their combination creates all other colors. Many scientists tried to dispute Newton-s theory, one of them being Johannes Wolfgang von Goethe. He claimed that white light should break whenever possible. By reflecting the white light on the wall of the room, there were different colors on the edges of the circle, and the light in the middle was white. Therefore, he concluded that color closest to the white is yellow and a color closer to the edge is blue. Leonardo da Vinci claimed that an eye absorbs the light, i.e. electromagnetic waves. The term light purports the occurrence, which allows us to see things that are around us.

Light is a narrow band of electromagnetic radiation visible to the human eye, caused by an electromagnetic field disorder. Electromagnetic radiation covers wide spectrum of energy but light is only part of the total spectrum to which our eye

reacts. The wavelength of the visible part of the spectrum ranges from 380 to 750 nm. Human eye can see approximately 160 nuances of colors in the visible part of the spectrum [2,9]. Electromagnetic beams do not have limited wavelengths but tend to mix together, meaning that visible light may also contain some ultraviolet and infrared wavelengths.

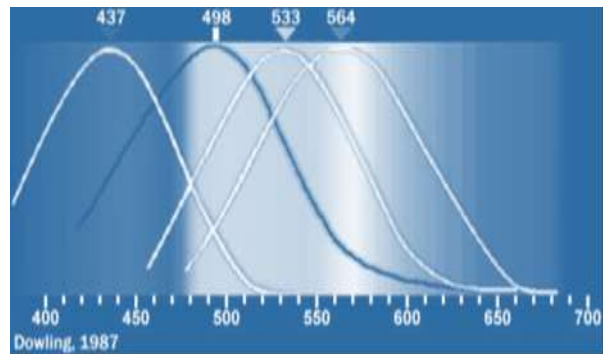


Figure 1. Eye sensitivity to colors [9]

The meaning of colors has been changing for centuries. The Celts used colors to describe the elements surrounding them and the Americans looked at colors as a basis for spirituality [1]. The color symbolism has been developing throughout history depending on different cultures and races. The basic anthropological colors of the Middle Ages of Western Europe found in all civilizations were white, red and black [10]. Colors were used for classification, labeling, differentiation, connecting and confrontation purposes [1,7]. In the Middle Ages appeared concepts such as intensity, density and color contrast. Colors have since 13th century been used for labeling individuals and certain social groups. Red was used for unbelieving Christians and the most noticeable color was yellow.

Colors And Marketing

Colors as an integral part of marketing communication

Color is a valuable tool and an integral part of marketing communication sending powerful message to consumers. Recent studies showed that

80% of information people remember relate to colors.

The meaning of colors for people begins with the birth and follows us throughout our lives. Vision is the most dominant and most developed sense with the greatest power to influence consumers-perception. Research showed that as much as 60% of a purchase decision for a given product is based on the correct color selection [11]. Colors create strong influence and cause reactions. Well-chosen color attracts attention, relaxes, while other color used in the same context can even irritate. As in every segment of life, likewise in marketing the first impression is very important therefore, color becomes an important factor of consumer communication.

Due to positive and negative meaning of colors, it is very important to choose the right colors while communicating with consumers. When launching new products, designers carefully choose colors to deliver a specific product message to customers. In addition to color choices, packaging design is also important and has to be appealing [12]. Therefore, it is very important to differentiate the products. Customer will always choose the product which is more appealing. Furthermore, a customer takes approximately from 1/20 to half a second to notice certain product. Research showed that buying decision is made within 90 seconds [1]. Due to the mentioned, it is important to choose a color which causes comfort. In such a short period, the brain perceives only pleasant colors and neglects others. Therefore, we should pay attention when buying products for quality or for packaging [13].

Integrated marketing communication

Integrated marketing communication (IMK) is a process of development and application of various types of persuasive communication with consumers and potential customers in a certain period. One of the main goals of integrated marketing

communication is to direct the behavior of the selected audience. The process starts with a consumer or potential customer and returns to the goal of determining and defining the forms and methods through which a persuasive communication process will evolve.

Five basic characteristics of integrated marketing communication are [11]: influence behavior, start from consumer or potential customer, use of one or all communication types, achieve synergy effects and build long-term relationship with customers.

Consumer behavior and marketing

Consumer behavior represents the process of obtaining and consuming products, services and ideas from the consumer unit. It can be defined as the behavior that consumers show in various research, purchase, use and evaluation of products that should meet their needs. According to the American Marketing Association (AMA) definition, consumer behavior is defined as a dynamic interaction of knowledge and environment factors that result in behavior and exchange of aspects of consumer life [11].

In order to achieve success, the marketing strategy should be based on the comprehension of consumer behavior completely. The modern marketing definition says that "marketing is a human activity focused on meeting the needs and desires of the human exchange process." The consumer and the company have their goals in the process of exchange. The company's goal is to sell products under the most favorable conditions. On the other hand, the main goal of the consumer is to meet the needs and wishes in the best way. Given that the consumer society is constantly changing and developing, there is no marketing strategy that would be effective at any time for different products, markets and industries [13].

Children and marketing

In marketing is important to know for whom the product is intended for. Research showed that small children like warm and strong colors like red, orange, yellow and magenta. When grown up, children become more disciplined and loose the sense for colors. Therefore, corporations "aim" for children as soon as they become aware their social environment. Children-s vulnerabilities and ads receptivity, "lack of resistance" to advertisements may be misused by marketing specialists [13]. Products to which brand labeling is the most addictive for children are ketchup, mayonnaise, coffee, headache, cosmetics, perfumes, beer and cigarettes.



Figure 2. Advertisement for chesterfield from the 1960-ies [14]

Children's advertisements are often indirect because they attract attention more easily. According to estimates, 90% of knowledge is based on information received by the media. Using popular characters and powerful messages reaches children's emotions, creating the need for the product. The ads determine which products are popular and which products children must have.



Figure 3. Using popular cartoon characters in advertising water Jana [15]

Marketing and brand labeling

Brand labeling is one of the biggest problems when it comes to color perception. Through various research and analysis, scientists tried to classify the reactions and responses of consumers to the use of different colors.

The study „The influence of colors in marketing“ [16] shows that 90% of current, subconscious judgment on products is based on colors. Connection between brand labeling and colors depends on suitability of a color which is used for a certain brand labeling. It is crucial to match the color with brand labeling since it represents it in an adequate way. Purchase decision of a certain product greatly depends on colors. Namely, color influences the way a customer perceives "personality" of a certain brand labeling. It is more important to match a color with what brand labeling represents rather than to follow the meaning of that color. Green is used for environmental brands (Timberland G.R.E.E.N) but also by finance companies [13]. The feelings, moods and pictures representing brand labeling have the most important role in convincing the customer to purchase the product.



Figure 4. Colors and brand labeling [16]

Colors in Advertising

Forms and goals of advertising

Advertising is a form of communication with a goal to inform a customer on products or services. Final goal of advertising is product sales and profit.

Goals of advertising [13]: stimulation of primary or selective consumption, advertisement of products or institutions, creation of direct or indirect effects, basic functions of advertising, communication function, sales function.

Colors and packaging

Packaging is one of the key factors when selling a product to a potential customer because it somehow hypnotizes and encourages for purchase. The color that produces the strongest effect is red, while attractive colors on a packaging are orange, blue, black, green, yellow, purple and gray. To improve sales, marketing experts have to carefully set the target group for whom the product is intended. If a particular product is for the younger population, it is recommended to use strong and clean colors. Unlike younger population who prefer strong and cheerful colors, middle- and middle-aged population prefer pastel colors. The cosmetic industry usually uses light blue and light green color for advertising face-care products. [1,8]

Key elements which should persuade customer to purchase a product: symbols and words of a certain product, illustrations and color.

By combining white packaging with different colors a range of different messages can be obtained. White packaging combined with red decoration attracts attention to the product and encourages excitement. On the other hand, if you want to advertise a fun product, a yellow decoration is used. Sophistication and prestige is achieved by using black decoration or printing [17].



Figure 5. Product in white packaging [18]

By using black packaging, the degree of secrecy, elegance, cost and value is achieved and by combining black packaging with any other color a strong message can be sent to potential customers. Furthermore, by combining black packaging with golden printing elegance and sophistication can be achieved. With the mentioned, our product attracts higher-income market.

If we want to attract women market, the combination we should use is black packaging with pink printing. Pink soothes the message we want to send. By adding brighter colors on the packaging, the seriousness is reduced [17].



Figure 6. Product in black packaging [19]

Blue communicates confidence, strength, reliability and unity. If we want product to look more professional and serious, dark blue is used. Blue encourages relaxation and calmness. Younger population often associates it with mature people. Blue is the favorite color of both sexes and is therefore the safest color to use [17].



Figure 7. Product in blue packaging [20]

By using red on packaging, attention is drawn to the product, senses are stimulated and excitement is awoken at potential customer. Brighter nuances of red are more exciting and energetic and generally less perceived than darker nuances. Dark red is perceived as professional and luxurious color. Black printing on red packaging can add sexual connotations to the product [17].



Figure 8. Product in red packaging [21]

Green is used in the packaging of natural, organic and healthy products. Green is the color of balance and harmony of mind, body and emotions. If elegance and sophistication are to be achieved, dark green color is used, which implies wealth, luxury and professional quality [17].



Figure 9. Product in green packaging [22]

Orange packaging of product indicates the availability of products, entertainment and adventure. When purchasing products in orange packaging the product can be of high quality and cheap or just cheap and of poor quality. By adding

black on orange packaging the perceived value of the product can be increased [17].



Figure 10. Product in orange packaging [23]

Yellow inspires originality and creativity. If yellow packaging is used, the product can imply originality and innovativeness or something cheap or fun. Products packed in yellow attract customer-s attention.



Figure 11. Product in yellow packaging [24]

Using turquoise is ideal for cleaning products packaging. It is also good for use in healthcare because it balances emotions and calms the spirit. The combination of turquoise with red gives rise to excitement and the combination of turquoise and pink gives confidence to the female population. If turquoise packaging is added to dark blue, conservatism is achieved.



Figure 12. Product in turquoise packaging [25]

The use of purple in packaging implies luxury, extravagance and top quality. Combining purple with different colors on packaging sends a certain message to potential customers. If we combine purple packaging with gold or silver prints, luxury, prestige and quality are achieved. By adding red color the excitement is achieved, and by adding magenta the liveliness is achieved.



Figure 13. Product in purple packaging [26]

Reserach And Data Analysis

A survey on social networks [27] was conducted for the purpose of research in August 2016, involving 54 respondents of which 55.6% were women and 44.4% were men. The questionnaire consisted of 21 questions, where two questions related to demographic data and other 19 questions focused on the set research goal. The obtained data were analyzed by descriptive statistics. The majority of respondents were aged 18-40 (59.3%) and respondents of the age group younger than 18 years and older than 40 years responded to the questions in the same ratio (20.4%). The mentioned is a limitation of the research as it is a small sample.

When asked "What is your favorite color?", majority of respondents chose blue and the color they prefer the least is yellow.

When asked „What color is according to you the least noticeable?“, respondents chose red (57% of respondents), yellow (35% of respondents) and orange (more than 7%). Emotion that is usually associated with red is love and passion (70.4%) and with power the rarest (14.8%). Respondents were given the opportunity to give more answers to some of the questions, which was also the case.

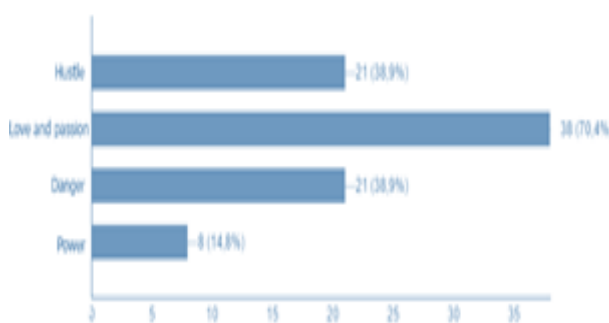


Figure 14. Emotions that respondents associate with red

Emotions that respondents associate with blue are trust (51.9%), wisdom (48.1%), formality (35.2%) and truth (24.1%).

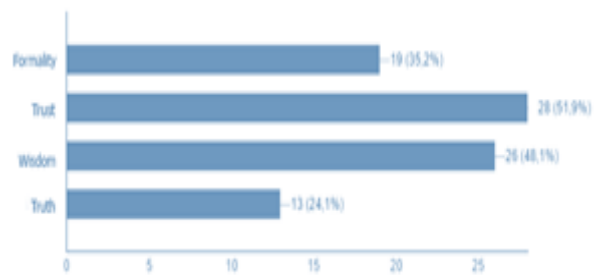


Figure 15. Emotions that respondents associate with blue.

Light is an emotion that respondents usually associate with yellow. Out of 54 respondents 35 or 64.8% chose yellow which represents the light, while the smallest number of respondents, 8 or 14.8% relates it with disturbance.

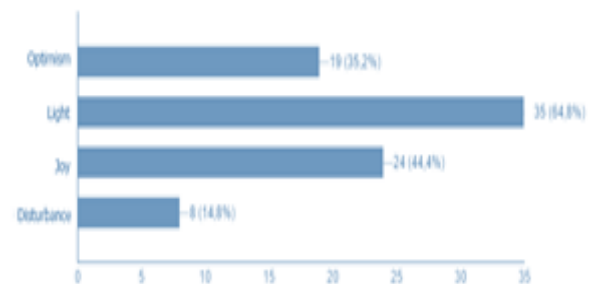


Figure 16. Emotions that respondents associate with yellow

Respondents usually associate green with freshness (64.8%).

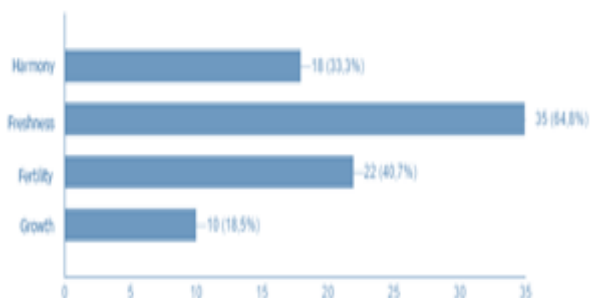


Figure 17. Emotions that respondents associate with green

When asked „What is the importance of colors in advertising?“ and majority of respondents, 53.7%

stated that colors are important in advertising and 35.2% responded that they are very important in advertising.

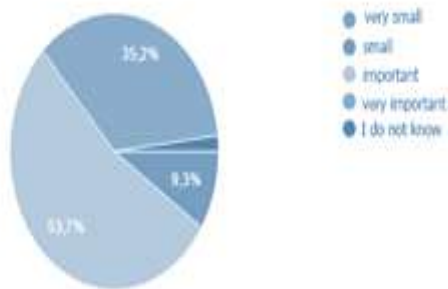


Figure 18. Importance of colors in advertising

When asked „Do you think that color influences the purchase of a certain product?, 90.7% of respondents disagreed.

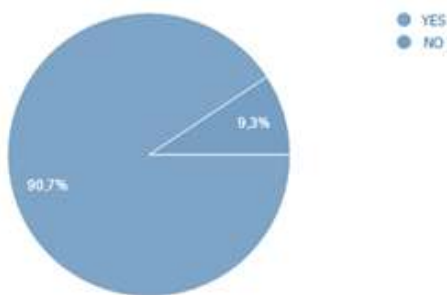


Figure 19. The influence of colors on certain product purchase

Psychology of colors has a great influence on food selection in stores. The colors are closely related to food and are one of the key factors in choosing food. Studies have shown that people do not want to eat certain food unless its color is different from what they expected. The colors are responsible for increasing or decreasing appetite in humans. By stimulating emotional reactions, red increases appetite more than any other color, and blue decreases it.

When asked „What color decreases appetite?“, 81.3% of respondents opted for blue, while 12.5% of respondents opted for red.

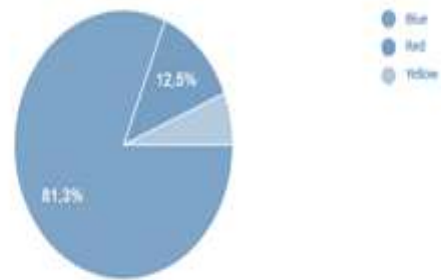


Figure 20. Colors reducing appetite

When asked „Is color one of the key marketing factors?“, more than 83% respondents agreed, while 11% stated that they do not know.

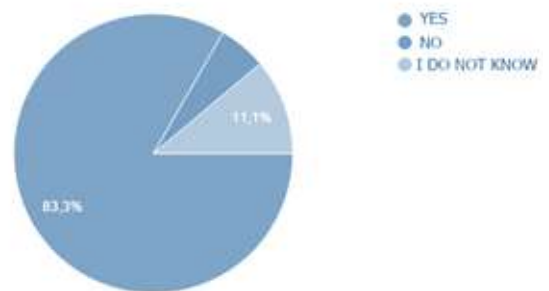


Figure 21. Color as a key marketing factor

When asked „Do marketing experts and corporations negatively influence children with various advertisements?“, more than 90% respondents agreed.

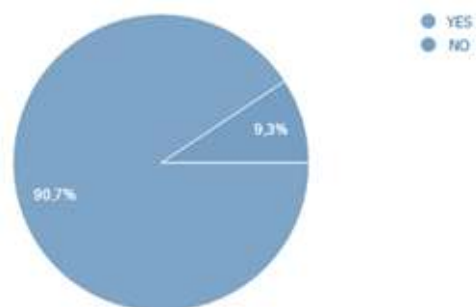


Figure 22. The influence of marketing on children

When asked „*What is the decisive factor when purchasing a particular product?*“, 66.7% of the respondents answered that it was the packaging design, while the other respondents decided it was the price or quality of the product.



Figure 23. Decisive factor when purchasing a particular product

Conclusion

In this research authors came to the conclusion that color is one of the key elements of the whole marketing strategy dominating in marketing communication.

Marketing experts are very well acquainted with the psychological meaning of colors and their influence on consumers. With careful color selection in communication, product design and advertising a message that is based on the correct color selection reaches our "awareness" and creates the need to purchase a particular product. This leads to persuasion and ultimately to the desired behavior of the consumer.

In the survey conducted on 54 respondents it was concluded that blue is the color usually chosen by respondents and the color they prefer the least is yellow. Respondents answered that the most noticeable colors were red (57% of respondents), yellow (35% of respondents) and orange (more than 7% of respondents). The emotions that are most closely associated with red are love and passion (70.4%), while the emotions that are associated with blue are trust (51.9%), wisdom (48.1%), formality (35.2 %) and truth (24.1%). Light is the

emotion most closely associated with yellow, 64.8% of respondents associate yellow with light. Green is usually associated with freshness (64.8%). 53.7% of the respondents answered that the colors are important in advertising and 35.2% of them responded that it is very important to use colors in advertising. 90.7% of respondents believe colors affect the choice when purchasing a particular product. By stimulating emotional reactions, red increases appetite more than any other color while blue reduces it and by research it is proven that 81.3% of respondents answered that blue reduces appetite. Most of the respondents, 83.3% believe color plays an important role in marketing and is one of the deciding factors in product selection. Research question "Do marketing experts and corporations negatively influence children with various advertisements?" more than 90% of respondents answered positively. The deciding factor when purchasing a particular product is the packaging design. Respondents also agreed that marketing experts and corporations with various advertising create a negative impact on children. Furthermore, research limitation is a small sample size.

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