
Impact of Colors on The Psychology of Marketing – A Comprehensive Over View

Nayanika Singh †

S. K. Srivastava ††

Colors have always played a significant role in impacting one's moods, emotions, feelings, sensations and perception and seem to offer possibilities for multifaceted interpretation rather than leaving room for only one way of looking at it. Different signs merge in a person's experience of a product as colors do not function separately and individually, but from multi-layered references and can influence consumers' purchase decision, how they see things, their emotions, choices and thus are integral to the realm of advertising and marketing. Furthermore the perception and application of color is strongly influenced by ones innate physiological and psychological predisposition, personal experiences, age, gender, personality, income, ethnographic and demographic factors that makes its application effective within the domain of marketing all the more cumbersome and challenging. However, as a marketing tool, color can be a sublimely persuasive force; and as a functional component of human vision, color can capture attention, relax or irritate the eyes, and affect the legibility of the text and - All things put together, the right colors empower and contribute to the success of an advertising campaign, a product, a service, or even an interior space and in contrast wrong colors can be a costly mistake.

The present paper attempts to highlight and discuss the following research questions:

1. What is the significance and importance of colors in daily life (with special reference to marketing)?
2. How colors act as a medium in influencing the psychology of customers, contributing towards their branding, advertising, marketing and sale, based on a comprehensive review of literature and some noted case studies?

Key Words: Colors, Marketing, Consumers

† Nayanika Singh is a Research Scholar, Dept. of Psychology, Punjabi University, Patiala.
Email: nanikasingh@gmail.com

†† S. K. Srivastava is Professor and Head, Dept. of Psychology, Gurukul Kingri University, Hardwar.
Email: sksrivastava1981@yahoo.com

Colors have always played a significant role in impacting one's mood, emotions, cognitions, sensations and perception (building blocks of psychology) ever since their applicability and usage was realized by the ancient Chinese, Egyptians and Indians as a therapeutic raw material. Thereon color was found virtually everywhere and for sure the advertising and marketing arena was no exception to it.

Vihma (1995, p.90) asserts that color (sign) seems to offer possibilities for multifaceted interpretation rather than leaving room for only one way of looking at it as, different signs merge in a person's experience of a product. Colors do not function separately and individually, but from multi-layered references. The complexity of color is increased because the references are not stable or fixed qualities of the product. Since references of the sign can be interpreted differently at different times and in different situations, the analysis cannot be final and complete. However color can influence consumers, purchase decision, how they see things, their emotions and thus it are an integral to marketing. Color photographs are commonly used in advertisements because they are thought to have superior attention getting properties (Meyer- Levy & Peracchio, 1995). Furthermore, color has been employed as an effective communication tool in advertising and marketing as it has very clever and persuasive influence. Because color exerts its effect on the subconscious level (Not all but in some cases) people, do not realize that they transfer its effects onto the contents of a package (or product) or onto an advertising message. Not being aware of the decisive

information of color on them, they fail to be defensive on purchasing a product or service (Cited in Lee, 2002, *Color as a tool for e-branding*, MA Design Futures, p.3-18).

“From the moment we know man experiences a message in color and how he reacts on the base of these sensations it is possible to influence him in a buying situation by selecting adequate colors”. Uneasily however, color is a moving element. Each color has a specific moving direction and their sensation of movement contains a symbolic value or language. Indeed color has changed its symbolic meaning as time and space according to efforts are made to define color symbolic meaning for the consumer (Favre, 1979, p.98). Furthermore the perception and application color is strongly influenced by ones innate physiological and psychological predisposition, personal experiences, age, gender, personality, income, ethnographic and demographic factors that makes its effective application within the domain of marketing all the more cumbersome and challenging. Rossotti (1983) rightly stated that “We must realize that color is a sensation, produced in the brain, by the light which enters the eye; and that while a sensation of a particular color is usually triggered off by our eye receiving light of a particular composition, many others as physiological and psychological factors”. Since colors are perceived, interpreted and applied also on the basis of hue (character), value (brightness) and intensity (chromatic purity) the role and contribution of experience cannot be undermined. As experience teaches that certain combinations of different colors are pleasing, others displeasing or

indifferent. The question arises, what determines the effect? Those colors are pleasing among which some regular i.e. orderly, relationship obtains. Groups of colors whose effect is pleasing, we call: harmonious, so we can set up the postulate: Harmony = Order (Itten, 1970, p.20). Furthermore, Zettl (2005) argues that, "color energy is principally determined by saturation level: highly saturated warm colors carry more aesthetic energy than do de-saturated cold colors". All these being focal to the domain of the "psychology of effective marketing".

Importance of Colors in Daily Life and with Special Reference to Marketing

"Colors and light are major factors in man-made environments; their impact influences mans psychological reactions and physiological well-being. It is no longer valid to assume that the only role of light and color is to provide adequate illumination and a pleasant visual environment". (Mahnke & Mahnke, 1987).

As a marketing tool, color can be a sublimely persuasive force. As a functional component of human vision, color can capture attention, relax or irritate the eyes, and affect the legibility of the text. All things considered, the right colors empower and contribute to the success of an advertising campaign, a product, a service, or even an interior space. In contrast, using the wrong colors can be a costly mistake (Colorcom.com).

However, it has been observed that young people between the ages of 6 and 47, it is indicated that females prefer warm colors and males the cool evaluation of such colors. On the other

hand, as they grow older, both sexes lose interest in intensity of colors and gain interest in hue. Children are at their peak for color-dominance at age 4 and a half, they turn to form dominance by age 6 (throughout adulthood) that is accompanied by life-long interest in color blue. An interesting corollary to this are the preferences by older adults (over 65 years) for bright primary, secondary and tertiary colors over pastel shades which stands a sharp contrast to popular institutional opinion (Sharpe, 1981).

Here is a comprehensive overview with regards to significance of various colors from the standpoint of both daily life and with respect to marketing.

- **Red** – Red is an intense color and has a vibrant and powerful impact on ones personality and emotions. It is used to indicate celebration, purity, passion, strength, energy, fire, sex, love, excitement, speed, heat, arrogance, ambition, leadership, masculinity, power, danger, blood, war, anger, revolution and communalism. Red tends to raise blood pressure, pulse rate, respiration, perspiration and excites the brain waves that contribute in stimulating people to make quick decisions. It is popularly used by product designers and advertisers to highlight objects of importance, endorse brands and in foods and flavors.
- **Blue** - Blue is considered to be a cool and non-threatening color which has a tranquilizing effect on the mind. It is used to symbolize water bodies, depression,

tranquility, trust, confidence, conservatism, dependability, wisdom, wealth royalty, truthfulness, creativity and plays a significant role in religious beliefs and ceremonies. Furthermore, it tends to lower blood pressure, pulse rate and brain waves. It is also used to symbolize berry and resin flavor.

- **Green** - Green signifies a balanced and a rejuvenated mind. It symbolizes growth, rebirth, renewal, nature, fertility, youth, good luck, generosity, health, abundance, stability and creative intelligence. It is also used to symbolize lemon flavor.
- **Yellow** - Yellow signifies a happy and cheerful disposition of the mind but, when confronted with too much it signifies anger. It is used to represent sunlight, joy, earth, optimism, intelligence, hope, liberalism, wealth, dishonesty, weakness, greed, decay aging, femininity, gladness, sociability and friendship. It is popularly used to signify butterscotch, mango and pineapple flavors.
- **White** - White represents purity, peace, neutrality and tranquility of the mind and body. It is used as a backdrop to give a neutral effect. Furthermore, it symbolizes the portrayal of youth, sterility, light, reverence, truth, snow, air, cleanliness, coldness, fearfulness and humility. It is also used to symbolize vanilla flavor /essence.
- **Black** - Black is a multi-dimensional color and is used to symbolize absence, rebellion, modernity,

power, sophistication, formality, elegance, mystery, style, evil, emptiness, darkness, seriousness, conventionality, unity, sorrow, professionalism, sleekness and mourning in the west.

- **Gray** - Gray is a blaze color and is used to portray elegance, respect, reverence, wisdom, old-age, pessimism, boredom, decay, dullness, urban sprawl, intense emotions, balance, mourning and neutrality.
- **Orange** - Orange color signifies a happy, balanced and an enthusiastic mind. It is used to portray energy, heat, fire, playfulness, gaudiness, arrogance, warning, danger, desire, royalty and religious ceremonies and rituals. It is also used to signify orange and citrus flavor.
- **Brown** - Brown color has an earthy and environmental quality and is generally coupled with green. It is used to represent skin tones, calmness, boldness, depth, natural organisms, richness, tradition, heaviness, poverty, dullness, roughness, steadfastness, simplicity, dependability, friendliness and aids in stimulating appetite and is therefore popularly used for advertising various bakery products, chocolates, foods and flavors.
- **Pink** - Pink is considered to be a sister color of red and has a tranquilizing effect on the mind. It is used to symbolize gratitude, appreciation, admiration,

sympathy, socialism, health, femininity, love, marriage, joy, innocence, flirtatiousness, child-like behavior and symbolizes sweet taste; therefore it is used for the coloring and packaging of sweets, candies, bakery products and strawberry flavor.

- **Purple**- Purple is considered to be the color of royalty and wisdom in the west and has a spiritual effect on the mind. It is used to portray nobility, humility, spirituality, ceremony, mystery, wisdom, enlightenment, flamboyance, exaggeration, sensuality, pride and lavender essence.
- **Indigo** - Indigo is used to symbolize spirituality and intuition.
- **Violet** - Violet is used to portray elegance, grace and artistic creativity.
- **Magenta** - Magenta is used to portray artistic creativity.
- **Rose** - Rose is used to represent optimism, hope and love and used in advertising to signify rosy flavors.

Furthermore, Morton (2001) indicates the following attributes of colors that come handy in packing, branding, labeling, advertising and marketing of products;

- Bright vivid colors such as pure red and blue are energizing and outward focused.
- Extremely bright, electrifying colors such as lime green and fuchsia are festive 'hep' and dynamic.
- Muted Gray-based colors such as blue-grey are sophisticated and reserved.
- Dark shades such as deep forest green and navy blue are dignified and professional.
- Light shades of most colors such as pink and light blue are delicate and ethereal.

Role and Importance of Colors on the Psychology of Marketing

"Companies often become interested in the color of the interior of their office because it is believed its appropriate use will make people work harder. Red, orange and yellow may be the colors, they choose because they may tend to stimulate and excite. Others may choose colors such as pale-greens, light – yellows and off-whites because these colors offer a more soothing environment, and allow workers to focus on their work" (Wollard, 2000).

Review of literature indicates that colors have a profound effect on the efficacy of the message being conveyed and therefore plays an integral role in increasing the credibility, attractiveness of the product and the persuasibility of the customer in the following ways:

- Colors can integrate, that is they create a visual unity of the sentiments shown in an advertisement or poster.
- Colors can make objects and scenes resemble very closely what they look like in real life.
- Through symbolic interpretation, colors add themselves to the imaginary and imply comparisons. Hence identity is transferred from one object to another (Favre, 1979, p.100).

Furthermore, Meyers-Levy & Peracchio (1995) suggest that when consumers' processing motivation is low, products attitude will tend to be based on simple heuristics associated with superficial cues such as the physical attractiveness of the photo, the product and/or the product user or spokesperson. Because color is likely to enhance the perceived attractiveness of these objects, consumers are likely to produce more favorable product attitudes when advertisements contain certain color, rather than only black-and-white. However, when consumers are motivated to process an advertisement critically and extensively with an eye towards substantiating the advertisements' assertions, it appears that the color may have one of the two effects:

- ✓ Firstly, color can consume resources by stimulating inferential processing, that may benefit advertisements' claim substantially, as colors and objects that are agreeable with the message advocacy are processed.
- ✓ Secondly, color may undermine advertisements, claim substantially by usurping resources that would otherwise have been devoted to processing substantial information.

Studies indicate that the color of products, the income earned and the characteristics of the consumer play an important role in deciding preferences for particular goods and commodities that they would like to purchase. The Cooper Marketing Group developed "Color Lifestyle" groups that place consumers in three different groups according to the effect that color has on

the products they buy. These groups were :(Cooper, 1994)

- ❖ *Color Forward Consumer-* Color forward consumer group include consumers who like to be the first to try a "new" color and are willing to spend more money for it. They form the bulk of the market and tend to consist women under the age of 30 years or over 50 years or men under 30 years; city dwellers, impulse buyers and people who make less than 35,000/year.
- ❖ *Color Prudent Group-* Color prudent group include consumers who will buy a new color only after seeing a friend try it. They often put quality ahead of color. When choosing a product they tend to be men or women from the age group of 30-50 years, sub-urban, carefree shoppers, and people who make more than 50,000 a year.
- ❖ *Color Loyal Group-* Color loyal group include consumers who stays with "safe" colors such as blue, gray and black rather than fashionable colors. They include men over 60 years, sub-urban, or rural, and may fall anywhere in the income bracket. They form a small segment of the market but, a predictable group as they buy the same color each year (Cooper, 1994)

Review of Literature

A substantial review of literature indicates that colors have a profound role in both advertizing and successfully marketing the products. Mehrabian & Valdez (1994) studied the effects of color, hue, brightness and saturation using

PAD (Pleasure- Arousal-Dominance) emotion model (stresses on the fact that emotional states of persons change continuously throughout the day as it progresses) and standard chips. Saturation and brightness correlated strongly with effects on emotions. Brightness effects were nearly the same for all chromatic and achromatic colors. Blue, blue-green, green, red-purple, purple and purple-blue were found to be the most pleasant hues; while yellow and green-yellow were the least pleasant. Green-yellow, blue-green and green was the most arousing and purple-blue and yellow-red were the least arousing. Green-yellow induced greater dominance than red-purple; that is it made subjects feel a higher degree of control in the environment. Furthermore, Osgood, et.al (1957) showed empirically that there was a strong association between color and objects; at-least on the basis of an evaluative scale of preferences. On an activity scale of preferences , the ordering of colors generally followed the hue dimension "hot" colors such as red and yellow, lean towards activity, black and white were by and large neutral and "cold" colors such as green and blue were closer to the passive end of the spectrum. Colors could also be ordered along the saturation dimension on the potency of scales; the more saturated the color, the more potent the object being judged is perceived. It appears that the evaluative effect of the color interacts with the nature of an object, where as the effect of color upon judged activity and the potency of objects with which they are associated are systematic and consistent with the hue and saturation dimensions, respectively.

Studies indicate that packaging has a significant impact of consumers' perception and choice; as packages are used as a means of attracting attention their attention, communicating brand and product meanings for which colors are a handy tool. Furthermore, according to Schmitt & Pan (1994), "*Colors have meanings and, as such they are fundamental tool in corporate marketing strategies and communications. These underlying meanings are often used for the purpose of product and brand differentiation.*"(Schmitt & Pan, 1994).

Gordon, et.al (1994) focused their research on the colors of packages. Their results support the suggestion that colors do communicate. Colors were found to be related to the brand as they were found to communicate the quality of the brand. Furthermore, colors were implied to be related to the core product as the study found that colors communicate e.g. such as feature of the product as taste. Their study also implies that colors have an impact on the behavior of consumers e.g. they discovered that colors have an impact on brand evaluations and on brand choices.

Furthermore, colors play a dominant role in advertising through yellow pages and via the internet (through web-pages). Lohse & Rosen (2001) suggest that the use of color in the yellow pages advertisements and use of photographic quality increases the perception of quality of the products/services and the credibility of the claims made about products or services for a particular business when compared with non-colored advertisements. Other than this, use of color in yellow pages advertisements creates a more favorable

attitude towards the advertisement and the advertiser. Gorn, et.al (2004) demonstrated that the color of a webpage background can affect the perceived loading time of the page. The researchers used sliding scale between 1 and 9 and tested for feelings of relaxation, calmness, peacefulness, uneasiness, tension and anxiousness of the background colors changed, so do the participants feelings of relaxation and perceived quickness. The authors studied the impact of blue and yellow background webpage colors on users' time perceptions while browsing the web. They investigated the time between the color of a web page's background screen while the page was downloading and the perceived quickness of the download. The authors predicted that the background screen color influences how quickly a page is perceived to download and that the feelings of relaxation moderate the influence. The results show that participants who viewed the color blue perceived the page as downloading faster. These browsers had a greater feeling of relaxation and positive attitude towards the website. One limitation of the study was that it only tested blue and yellow, and findings were confined to the effects of time perception. Also, yellow might be a weak comparison to blue because there are stronger colors that can be used. A good option is red because red has more consistently been found to be different from cool colors (blue & green) than yellow.

Colors have been central to the endorsing food brands and flavors across different cultures, age-groups and gender the world over. A study carried out at O'Hare found that color influenced

peoples' perception of relative sweetness in case of a candy. The brown and pink candies were judged quite sweet, while blue and green candies were thought to be without any sugar at all. This also explains the relative success of pink on bakery boxes. Coupled with adrenalin produced by yellow, saturated re-yellow combinations in light and paint are ideal for fast food places. Red is used in places that serve alcohol, although the tendency for this color to increase aggression may be less than desirable (Sharpe, 1981).

Furthermore, color consultant, Leslie Harrington evaluated pill colors for a pharmaceutical company, and surveyed several thousand people in 12 countries. As expected Harrington found that hues were received differently across the globe. Interestingly, lighter value blue was considered calming across all cultures, but responses to other colors varied. Other high calm colors were dark green in the U.S., Great Britain and Korea; medium green in Italy and Germany and brown in Japan (Konigsberg, 2007).

Case Studies

- *The Proctor and Gamble Case*

It was way back in the 1950's Proctor & Gamble the manufacturer of "Cheer" detergent was deciding on the colors of the "flecks" in the detergent. P & G tested three different color flecks red, blue and yellow. They produced many boxes of this detergent with the three colors. Consumer reports stated that people complained that detergent with yellow flecks didn't clean clothes, enough; red flecks actually damaged their clothes and

blue flecks were singled out for their ability to get clothes cleaner and it was these blue flecks that helped making “Cheer” detergent one of the longest lived brands in the market (Piiro, & Claudia,1997).

- *Brotherm Skin Product Company Case*

Brotherm a French skin product company used white, blue and silver with various tones of blue in all their color schemes for whole design product line stretching from using the same color palette throughout their uniforms, shop outfitting and site design; thereby giving the iconic symbol value; i.e. the website and the real world store and all consumer communications share the same identity so that messages to the customers are unequivocally from the brand. In this case white symbolizes purity, honesty and clarity; blue symbolizes the product component concentrate and spar water (Cited in Lee, R.N. (2002). *Color as a tool for e-branding*, MA Design Futures, p.3-18).

- *IMac Case*

Perhaps there is no better example of color impact on sales than the August, 1998 launch of teal IMac. Consumers bought up more than 800,000 machines in less than five months by January, 1999. Apple had launched five more fruity colors in blueberry, grape, tangerine, lime and strawberry (Parmer, 2004).

- *The Heinz Case- An Example of Color Incongruity in Marketing*

Review of literature indicates that sometimes use of an incongruous

color in advertisements can act as a powerful way of attracting and luring the psyche of customers towards brand selection and purchase. Meyers- Levy & Tybout (1989) claim that a moderate amount of using incongruity between a schema and an object may be beneficial provided the incongruity is perceived as interesting and positive. However, an incongruous color might also have adverse effects, shocking the consumer and so engendering a positive attitude towards the advertisement. It is important then from a managerial standpoint to know what might be the positive/negative effect of color incongruity in marketing.

Heinz had great success with the unexpected color change (based on the incongruity principle) when it launched the green ketchup variety in 2000; in consequence to which more than 10 million bottles were sold in the first seven months, with a turnover of \$ 23 million in sale- simply just attributable to a mere color change from red to green.

- *Comet Superstore Case*

Angela Wright (1995) a color expert, selected blue and light orange for the signage’s which indicated “white goods” and brown goods (white goods being trade name for domestic appliances such as fridges, cookers, washing machines etc). Brown goods being the more leisure oriented items such as T.V. and videos, music systems, camcorders and other gadgetry. For the flooring on

domestic appliances side aqua blue and for those on brown goods, violet was adopted. Spring green was selected for cash desk. Violet shade was associated with future modern technology and green symbolizing money. Yellow was added for the central aisle flooring which divided the two sections. Spring color group such as light orange, blue, spring green, yellow were appropriate for the brand concept, cheap and cheerful and for the target, young peoples' sensibilities (Wright, 1995).

REFERENCES

Color Consultation: We create colors of success. Retrieved, August, 3, 2011 from www.colorcom.com.

Cooper, Mimi (May, 1994). The Color of Money May Actually Be Fuchsia. Discount Merchandiser. Retrieved, August, 2, 2011 from New York Public Library Online.

Favre, J.P. (1979). *Color and Communication*, Zurich: ABC Edition.

Gordon, A., Finlay, K., & Watts, T. (1994). The Psychological Effects of Color in Consumer Product Packaging. *Canadian Journal of Marketing Research*, Vol. 13, 3-11.

Gorn, G.J., Chattopadhyay, A., Sengupta, J., & Tripathi, S. (2004). Waiting for the web. How Screen color affects time perception. *Journal of Marketing Research*, XLI, 215-225.

Itten, J. (1970). *Te Elements of Colored Faber Buren*, New York: Van Nostrand Richmond Company.

Conclusion

"Color has the ability to increase credibility of the advertiser and believability of ad claims, particularly if the ad claims are color related" (Lohse & Rosen, 2001). However, more research and review of supporting literature is required with the collaborative efforts of advertising and marketing experts, psychologists and color specialists, keeping in mind the changing perception and mind-sets of people centering around the factors influencing their choice and decision for the purchase of products/ brands where colors play an essential; if not the only role, around which revolves the essence of effective marketing.

Konigsberg, E. (Jan, 2007). Made in the Shade. *New Yorker*, Vol. 82, 42-49.

Lee, R.N. (2002). *Color as a tool for e-branding*, MA Design Futures, 3-18

Lohse, G.L. & Rosen, D.L. (2001). Signaling Quality and Credibility in Yellow Pages Advertising : The Influence of Color and Graphics on Choice. *Journal of Advertising*, Vol. 30(2), 73-85.

Mahnke, H.F., & Mahnke, H.R. (1987). *Color and Light in man-made Environments*, New York: Van Nostrand Reinhold Company.

Meyer-Levy, J., & Peracchio, L.A. (1995). Understanding the Effects of Colors: How the Correspondence between Available and Required Resources Affects Attitudes. *Journal of Consumer Research*, Vol.22, 121-138.

Meyer-Levy, J. & Tybout, A.M.(1989). Schema Congruity as a basis for product evaluation. *Journal of Consumer Research*,

Vol. 16, 39-54.

Morton, J. (2001). *Color, Voodoo for E-Commerce*, Honolulu: COLORCOM.

Osgood, C.E., Suci, G.J., & Tannenbaum, P.H. (1957). *The Measurement of Meaning*, Urbana, IL: University of Illinois Press.

Parmer, A. (Feb, 15, 2004). *Marketers ask: Hues on first*. Marketing News.

Piirto, R., & Claudia, M. (1997). *The Wonderful World of Color*. Marketing Tools. Retrieved, August, 2, 2011 from New York Public Library Online.

Rossotti, H. (1983). *Color: Why the World Isn't Grey*, Princeton, New Jersey: Princeton University Press.

Schmitt, B.H., & Pan, Y. (1994). *Managing Corporate and brand identities in the Asia-Pacific Region, California*. *Management Review*, Vol. 36(4), 32-48.

Sharpe, T.D. (1981). *The Psychology of Color and Design*, Totowa, New Jersey: Littlefield, Adams & Co.

Valdez, P., & Mehrabian, A. (1994). Effects of Color on Emotion. *Journal of Experimental Psychology*, Vol. 123 (4), 394-409.

Vihma, S. (1995). *Products As Representation- A Semiotic and aesthetic study of design products*, Finland: University of Art and Design, Helsinki: UIAH.

Wollard, K. (2000). *Orange You Glad You Aren't Blue?* Newsday. Retrieved, August, 2, 2011 from New York Public Library Online.

Wright, A. (1995). *The beginners guide to color psychology*, London: Kyle Cathie.

Zettl, H. (2005). *Sight, Sound, Motion: Basic Media Aesthetics*, Belmont, CA: Thomson Wadsworth.