

Implications of Red Color In Our Life's

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ABSTRACT

This paper aims to examine the study how we acquired the color and the implications of red color in our life's related to different fields. Red color is taken as different symbols in different countries or regions. Color is ubiquitous in individuals' perceptual experience of the world. Daily encounters with people, objects, and environments are rife with color. Given the ubiquity of color in people's lives, it is not surprising that a great deal of research has been conducted over the past century focusing on the physics, physiology, and psychology of color. Red color give impact in every fields such as gender, restaurant, customs, sex relations and waiting time etc. This article can be a better understanding of the implications of red color. We close with thoughts on the need for rigorous scientific work on color psychology.

Keywords: *Color, Implications, Red, Ubiquity, Rigorous*

How we acquired color?

Color is light carried on wavelengths absorbed by the eyes that the brain converts into colors that we see. Light can be decomposed into a spectrum of six distinct colors: red, orange, yellow, green, blue, and violet. The red has the longest wavelength whereas the violet the shortest. An object appearing yellow absorbs all of the colors in the spectrum except the yellow light. This unabsorbed light is reflected back from the object into the eyes from where it travels to the brain where it is interpreted as yellow. The eyes are comprised of cones and rods that allow us to see color and light, respectively. There are three types of cones: type I is associated with blue, type II with green, and, type III with red (Harrington and Mackie, 1993). Other colors are combination of these three colors. Psychologists have classified colors as warm (red and yellow) and cool (blue and green) colors. However, the distinction between warm and cool colors is relative; for example, when red and yellow are paired together, yellow is considered warmer than red. White, black, and gray are considered neutral colors. Because color experiences vary from individual to individual, it is not possible to know how another person experiences color. One person's experience of a shade of red can be perceived differently from another person. Rods detect light that is necessary for colors to exist. Light affects the perception of colors. Whether it is the color of walls in a restaurant or

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retail stores or merely the color. Electrical lighting has two major forms: incandescent and fluorescent lightings. Incandescent lightings enhance the warm colors while giving a poor appearance to cool colors. Halogen is a special form of incandescent lighting. Fluorescent lightings account for approximately 67 percent of lightings used worldwide (Veitch, 2001), but it lacks the warm colors of the spectrum. Although, it enhances blue and green, it makes red, orange, and yellow appear dull. However, a special type of fluorescent lighting called “full-spectrum” enhances all the colors of the spectrum (Veitch, 2001). Proponents of the use of full-spectrum fluorescent lighting believe that it contributes to developing human cognitive abilities. Studies have attempted to link lightings with memory, mood and cognitive abilities and found inconsistent results (Knez, 2001; Veitch, 2001). Regardless of lightings’ direct effect on cognitive abilities, it contributes to determining color appearance.

Color controversy

Scientific findings on color theory appear to be as contentious as the research on lighting’s effects. Conventional psychologists dismiss any role of color in influencing human personality, yet psychiatrists use color tests in conjunction with other tests to determine personality. While physiological responses to colors are part of the human experience, the evidence linking specific colors to specific responses is inconclusive (Kaiser, 1984).

Red color and culture

Red and white is a combination used for ritual decorations in Melanesia and for representing the Sacred Heart of the Catholic Church in Mexico (Tektronix, 1988).

Red color and gender

There are differences in the perception of colors between genders. Khouw (2002) found that men were more tolerant of gray, white or black than women, and that women reacted to the combinations of red and blue more frequently, and got confused and distracted more than men. It was also found that the combination of red and blue was the most preferred color by adults. These results suggest that there are gender differences in the perception of color. True, the subject’s impressions of color seemed to be more subtle and effected not just by the coolness or warmness of the color palette, but also by the calibration of value, chroma, and contrast used in the interiors (Khouw, 2002)

Red color and restaurants

The red color stimulates appetite because of its effect on our metabolism, making red a popular color choice among fast-food restaurants.

Red color and waiting time

Colors influence the perception of the passage of time. Time seems to pass slowly and objects seem larger and heavier under a red light. On the contrary, time seems to pass quite quickly and objects seem smaller and lighter under blue light. Casinos take advantage of this principle – they use red color lighting to get their customers excited while making them feel that they are not wasting a lot of time in the casino. Colors and brands evoke brands.

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Whether it is Heineken's distinct green label, Coca-cola's red, Shell's yellow, or Cadbury's purple, all have different color values to different consumers. The high importance placed on color is an acknowledgment of manufacturers' understanding that color has strong emotional loading, able to prompt a swifter response to packaging than either the written work or imagery (Tutssel, 2000). Holograms and metallic colored packaging on Colgate toothpastes entice consumers to choose their toothpaste over Proctor & Gamble's.

According to a recent report, serving food on red plates can reduce food consumption (Genschow, Reutner, & Wänke, 2012). This report is interesting both practically and scientifically. On the practical side, it brings empirical evidence to bear on a issue that is muddled by contradictory common-sense opinions. The possibility of using color to control food consumption is attractive for weight-loss programs and possibly even for the treatments of eating disorders. However, guidelines on the possible use of color to reduce calorie intake often lack a solid empirical basis. On the scientific side, the report adds to a large literature on the effects of color on cognition and behavior (Bellizzi & Hite, 1992; Clydesdale, 1993; Elliot & Maier, 2007; Mehta & Zhu, 2009; Spence, Levitan, Shankar, & Zampini, 2010; Stroebele & De Castro, 2004). Genschow et al. (2012) reported two studies of the effect of plate color on consumption. In the first study, they asked 41 males to evaluate drinks served in plastic cups. In one condition, the cups had red labels whereas in the other they had blue labels. Participants drank significantly less from the red-labeled cups than from the blue ones. In the second study, they invited 130 participants to snack on pretzels while filling an unrelated questionnaire. Depending on the experimental condition, the pretzels were presented on white, blue, or red paper plates. Participants in the red condition ate significantly less pretzels than those in the blue or white conditions.

Red is a warm powerful, attention getting color. Red is a very visually empowering and attractive color for an e book cover. Cardinal and tomato red offer impact and creativity and a pure red are always a good choice.

The color of red is extremely dominating. Red reflects energy and motivate an individual to take actions and hopefully to buy your book. Used as accent color, it can stimulate people to make quick decisions and increases expectation creating a high arousal threshold.

Magenta when tinted with red to become purple stands for lush, rich and loyal.
The maroon tint represents sacrifice and bravery.

People who like red generally exciting, stimulating people to be with. They tend to stay on top of the things with passion and rest for life. Think of the red sports car that's generally associated with speed, excitement and young people.

Routine can drive red people "up the wall" since they crave excitement in their lives. The red market individual have a tendency to listen to what others tell them and then do whatever they please. They tend to be opinionated and patience is not one of their virtues.

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Psychological lovers of red are animated, optimistic, emotional and extroverted individuals experiencing life and living in every in every sense of the word.

People who are irritable, ill, exhausted, or bothered by many problems often reject red and turn to calmer colors for rest and relaxation.

Red has been proven to raise blood pressure and cause perspiration in some individual and is a symbol of war, violence, blood and aggression.

Evokes strong emotions like passion or intensity, encourages appetite, symbolizes love and danger. Eyes look to red first, it draws attention, creates movement and excitement. Too much red however, feels hostile.

Red clothing gets noticed but makes the wearer appear heavier. Red cars are targets for thieves. Decorators say that red furniture will attract attention. Since it is an extreme color, red clothing might not help people in negotiations or confrontations.

Red and sex relation-

Red is clearly linked to sex in the context of heterosexual interaction, and this link is viewed as emerging from both societal use of red and a biologically engrained predisposition to red. These two sources may contribute to the red–sex link in joint fashion. That is, we posit that the societal use of red is not random, but actually derives from the biologically based predisposition to perceive red as a sexual signal. For example, the aforementioned use of red lipstick and rouge may represent, at least in some instances, an attempt to mimic the vascularization present during ovulation and sexual excitation (Low, 1979). Likewise, red may be used in red-light districts because it is the color that appears on the sexually aroused female body (not only in the publicly visible sexual flush, but, more intimately, in the engorgement of the labia minora).

Empirical study

In the empirical work, Elliot et al. (2007) focused on the influence of the color red on performance in achievement situations. They posited that red carries the meaning of failure in achievement situations and, therefore, evokes avoidance motivation in such situations. Avoidance motivation is inimical for performance in most achievement settings, thus viewing red before an achievement test was predicted to undermine performance attainment. Support for the hypothesized deleterious effect of red on performance was obtained in a series of experiments. Elliot et al. (2007) showed that red can have negative, aversive implications in an achievement context; in the present work, we sought to show that red can have positive, appetitive implications in a relational context.

For instance in China the color red tends to make people feel calm, while in America red tends to make people more aggressive because Red is an exciting color. Red makes Americans aggressive. It speeds up their metabolism and gives them energy & inspiration. Effect of color on a person's mind is perceptual, rather than being physiological & inherent an effect of social training of the individual.

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Impact of red color in Indian society

The devilish connotations of red in the west are amusingly juxtaposed by the traditional bearings of red in the east.

The color red has played an instrumental role in Hindu customs and beliefs, perhaps the most ceremonious one being in the life of a married woman.

A girl's arrival into her role as the married woman is symbolized by the almost red henna on her hands and is sealed with the pinch of red powder sindoor on her head.

Matrimonial bliss and a promise of togetherness are all sealed by the warmth and binding power of the red drape and red accessories. The bride's first step into her new home is characterized by the ritual of her having to dip her feet in red water and walk bare feet on the floor of the house to symbolize the beginning of her new role.

Meaning Of The Color Red: Tilaka and Bindi Similar But Not Synonymous

The tilak, has to do with the third eye of Lord Shiva, the destroyer, one of the most revered Indian gods and part of the Trinity. The third eye is in tandem with Lord Shiva's third eye opening to beckon the end of the world. However its customary significance is that of the all-seeing, all-pervading power that protects the inner wisdom of those that it's applied on. The red tilak may be replaced by a tiny red dot on the foreheads of married women to symbolize spirituality.

A tilaka is always applied with paste or powder. It is usually applied for religious or spiritual reasons, or to honour a personage, event, or victory. A bindi is a Hindi term, tilaka applies to all of India. A bindi may be paste, a sticker, or even jewelry and can signify marriage, or be simply for decorative purposes. The bindi in particular is a symbol of feminine energy and supposed to protect both the wife and the husband. Although bindis have gone far from the traditional red circle, tradition and customs keep it alive at many places.

It is also a part of Indian custom to tie a long red string around the wrist of loved ones during prayer as a mark of protection and to safeguard against the evil eye. Individuals wear it for a month till the thread wears off.

Red in mythology denotes bravery, protection and strength. Red powder is often showered on deities at temples during prayer. The colored powder therefore has become a hugely intrinsic part of Indian culture.

Indian customs and culture are often described as riots of colors with almost every desirable color thrown in for good measure. But red truly remains the core symbol of power and spirituality, of protection and commitment. It is a color that has not faded the trials of time and stands alone as the most powerful.

The sexual denotations of the red in the West are replaced by the simplicity, purity and ritualistic candor of the color in the east. The dynamism of red has always led it to command

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power and awe. It's interesting however to see how different cultures utilized the color in their daily lives.

Red in India is considered holy and is symbolic of a certain time, place and action in one's personal life. While castes, beliefs and rituals may differ across religious sects in India, the overall implications of the color are universal.

CONCLUSION

It has been concluded that red color play a very important role in our day to day lives. Red color is taken as different symbols in different countries or regions. Red color give impact in every fields such as gender, restaurant, customs, sex relations and waiting time etc.

An awareness of the potential impact and influence of personal color association with emotion is an additional factor to consider within educational or clinical settings and is particularly important where direct use of color within assessment situations is being considered and used. We think that this is a highly promising research area in which many pressing questions await empirical consideration (e.g., How do color associations develop, and how does this development differ when biologically based predispositions are present versus absent? How potent are color effects in real-world contexts containing a wide variety of color stimuli? What is the duration of color priming?). The scientific study of color and psychological functioning is not an easy enterprise, as it requires careful assessment and calibration of lightness and chroma, as well as hue. However, we believe such efforts pale in comparison to the benefits of documenting the influence of a ubiquitous feature of the perceived social environment on important affective, cognitive, and behavioral processes outside of conscious awareness.

REFERENCES

- Adams, F. M., & Osgood, C. E. (1973). A cross-cultural study of the affective meanings of color. *Journal of Cross-Cultural Psychology*, 4, 135-156.
- Agoston, G. A. (1979). *Color theory and its application in art and design*. New York: Springer-Verlag.
- Alpert, J.I. and Alpert, M.I. (1986), *The Effects of Music in Advertising on Mood and Purchase Intentions*, University of Texas, Austin, TX.
- Bellizzi, J.A., Crowley, A.E. and Hasty, R.W. (1983), "The effects of color in store design", *Journal of Retailing*, Vol. 59 No. 1, pp. 21-45.
- Birren, F. (1952). The emotional significance of color preference. *American Journal of Occupational Therapy*, 79, 61-63.
- Cerbus, G., & Nichols, R. C. (1963). Personality variables and response to color. *Psychological Bulletin*, 60, 566-575.
- CIE (2004). *Colorimetry* (3rd ed.). Wien (A): CIE Central Bureau .
- Damhorst, M. L., & Reed, J. A. P. (1986). Clothing color value and facial expression: Effects on evaluations of female job applicants. *Social Behavior and Personality*, 14, 89-98.
- Elliot, A. J. & Niesta, D. (2008). Romantic red: Red enhances men's attraction to women. *Journal of Personality and Social Psychology*, 95, 1150-1164

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- Elliot, A.J., & Covington, M.V. (2001). Approach and avoidance motivation. *Educational Psychology Review*, 13, 73–92.
- Elliot, A.J., Maier, M.A., Moller, A.C., Friedman, R., & Meinhardt, J. (2007). Color and psychological functioning: The effect of red on performance attainment. *Journal of Experimental Psychology: General*, 136, 154–168.
- Fehrman, K. R., & Fehrman, C. (2004). *Color: The secret influence* (2nd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Fortney, S. M., Beckett, W. S., Carpenter, A. J., David, J., Drew, H., LaFrance, N. D., et al. (1988). Changes in plasma volume during bed rest: Effects of menstrual cycle and estrogen administration. *Journal of Applied Physiology*, 65, 525–533.
- Foster, C. A., Witcher, B. S., Campbell, W. K., & Green, J. D. (1998). Arousal and attraction: Evidence for automatic and controlled processes. *Journal of Personality and Social Psychology*, 74, 86–101.
- Frank, M.G., & Gilovich, T. (1988). The dark side of self and social perception: Black uniforms and aggression in professional sports. *Journal of Personality and Social Psychology*, 54, 74–85.
- Gamberale-Stille, G., & Tullberg, B. S. (2001). Fruit or aposematic insect? Context-dependent colour preferences in domestic chicks. *Proceedings of the Royal Society of London*, 268, 2525–2529.
- Gangestad, S. W., & Scheyd, G. J. (2005). The evolution of physical attractiveness. *Annual Review of Anthropology*, 34, 523–548.
- Gangestad, S. W., Simpson, J. A., Cousins, A. J., Garver-Apgar, C. E., & Christensen, P. N. (2004). Women's preferences for male behavioral displays change across the menstrual cycle. *Psychological Science*, 15, 203–207.
- Jacobs, K. W., & Suess, J. F. (1975). Effects of four psychological primary colors on anxiety. Kaiser, P. (1984), "Physiological response to color", *Color Research and Application*, Vol. 9 No. 1, pp. 29-36.
- Levy, I.B. (1984). Research into the psychological meaning of color. *American Journal of Art Therapy*, 23, 58–62.
- Maier, M. A., Elliot, A. J., & Lichtenfeld. (2008). Mediation of the negative effect of red on intellectual performance. *Personality and Social Psychology Bulletin*, 34(11), 1530–1540.
- Mehta, R. & Zhu, R. (2009). Blue or red? Exploring the effect of color on cognitive task performances. *Science*, 323, 1226-1229.
- Setchell, J. M., & Wickings, E. J. (2004). Sexual swelling in mandrills (*Mandrillus sphinx*): A test of the reliable indicator hypothesis. *Behavioral Ecology*, 15, 438–445.
- Setchell, J.M., & Wickings, E.J. (2005). Dominance, status signals, and coloration in male mandrills (*Mandrillus sphinx*). *Ethology*, 111, 25–50.
- Sillen-Tullberg, B., & Moller, A. P. (1993). The relationship between concealed ovulation and mating systems in anthropoid primates: A phylogenetic analysis. *American Naturalist*, 141, 1–25.

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- Soldat, A.S., Sinclair, R.C., & Mark, M.M. (1997). Color as an environmental processing cue: External affective cues can directly affect processing strategy without affecting mood. *Social Cognition* , 15 , 55–71.
- state. *Perceptual and Motor Skills*, 41, 207-210.
- Stone, N.J., & English, A.J. (1998). Task type, posters, and workspace color on mood, satisfaction, and performance. *Journal of Environmental Psychology* , 18 , 175–185.
- Whitfield, T.W., & Wiltshire, T.J. (1990). Color psychology: A critical review. *Genetic, Social & General Psychology Monographs* , 116 , 387–412.

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