



"COLOR PSYCHOLOGY IN CONSUMER DECISION MAKING: A STRATEGIC APPROACH"

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ABSTRACT -

In terms of branding and marketing, colors are quite important in influencing customer behavior. This study explores the complex relationship between color and customer perceptions, emotions, and actions. A lot of research has shown that color becomes offensive if the depiction of the color association is mismatched. To comprehend how color affects customer behavior, the current study was carried out. To learn more about the respondents' preferences for colors, an online survey was distributed to them. Blue was discovered to be the color most favored and yellow to be the least. The two genders' decisions differed significantly from one another.

The research revealed a substantial influence of color on consumers' purchasing decisions and brand recall. Moreover, significant variations were observed in respondents' preferences for purchasing, demonstrating distinct inclinations towards warm and cool colors, as well as warm and neutral color palettes.

Keywords : Colors, Consumers Behaviour, Sensory Marketing, Consumers expectations.

1. INTRODUCTION -

The impact of color on customer actions and choice-making processes is a significant and persuasive aspect in the fields of consumer psychology and marketing. Colors are very powerful beyond aesthetics; they may arouse feelings, arouse perceptions, and have a substantial impact on how people interact with companies, goods, and the shopping experience.

Numerous studies and observations have been conducted on the issue of color's effect on consumer behavior, and the results have repeatedly confirmed that color has a significant impact on how customers perceive, respond to, and ultimately select goods and services. The colors that are used to decorate product packaging and the visual style of business logos are examples of how well-chosen colors can convey meaning and influence customer behavior. According to Labrecque and Milne (2012), brands use color to establish their identities in the marketplace and differentiate themselves from rivals. As an illustration, Pepsi claims that blue is the color connected with its brand, while Coca-Cola claims that red is the color associated with its brand. As a result, the color associated with a brand contributes to brand awareness and strengthens its identity (Abril et al., 2009). Elliot et al. model 's of psychological functioning and color, created in 2007, outlined six guiding principles: "Colors represent certain significance; color significance is derived from two foundations: biology and learned associations; color triggers the evaluation of stimuli; this evaluation, in turn, motivates behavior; the process from recognizing significance to the motivational behavior is all non-conscious; and color evokes different feelings in different circumstances" (Elliot and Maier, 2007, p.251). Similar to package design, color is employed in retail store design to pull or attract customers as well as draw attention (Bellizzi and Hite, 1992). Numerous research has been conducted over a long period regarding the psychological and physiological effects of color. There are incredibly few studies that address the marketing implications.

Table 1. shows how to categorize colors into warm, neutral, and cold hues.

Warm colors	Neutral colors	Cool colors
Orange, Red, yellow	Gray, Black, White	Purple, blue, Green

Source: Literature review -

Most of the time, marketers are aware of the power of color. Therefore, this study was conducted to better understand how color affects consumer behavior. Such a study would aid marketers in comprehending the significance of colors, enabling them to use various colors depending on the scenario and environment.

2. A REVIEW OF THE LITERATURE-

Bellizzi and Hite (1992) investigated how color affects mood in an experimental study. mood, which has an impact on the emotional states that influence crucial customer reactions. A sample of 107 students was exposed to slides showing the interiors of store furnishings with either a red or blue interior a sample of 70 women was presented to one of two displays (red/blue) in experiment 1, while a sample of 107 students was exposed to slides showing the interiors of store furnishings with either a red or blue interior. The results of the two studies unmistakably demonstrated that consumers reacted to blue more favorably. Similarly to this, **Crowley (1993)** suggested that the human response to color has at least two dimensions. A non-probability convenience sampling method was used to choose the 100 female subjects for this study, who ranged in age from eighteen to sixty-four. Randomly, the subjects were placed in one of the experiments. Red, yellow, green, and blue were the four color conditions to which the respondents were randomly assigned. The stimulus was presented in a furniture store environment, with the background's color serving as the workable stimulus color and all other stimulus characteristics being kept constant between individuals. To observe the existence of distinct components within consumer responses to the stimuli, a 20-item scale with semantic differential was used. This scale was then subjected to principal components analysis using the rotation method known as varimax. The results of this study supported the "two-dimensional" concept. Blue and red, which have more extreme wavelengths, are seen as having a livelier atmosphere than other colors. The use of color in marketing was the author's next area of emphasis. Red is a popular color choice among fast-food restaurants because of its impact on human metabolism, which was discovered to promote appetite in eateries. Upon additional investigation, it was shown that colors have an impact on how people perceive the passing of time. In the future, research on color selection should be conducted and summarised before the release of a product because the company's image as well as the product's image might be negatively impacted by poor colour selection. To investigate the correlation between emotion and color, **Kaya (2004)** conducted a study with college students. 98 students from the sample were to investigate how color and emotion are related. 98 college students from the sample were asked to describe their emotional reactions to five basic colors—green, purple, red, blue, and yellow—as well as five intermediate colors.

According to the study, primary colors elicited the greatest amount of positive emotional responses, followed by intermediate colors and finally achromatic colors. The color green elicited pleasant feelings of comfort and relaxation mostly because it reminded most respondents of nature. The lowest number was for the green-yellow color. Primary colors covered favorable emotional responses, which were then followed by intermediary colors and finally achromatic colors. The color green elicited pleasant feelings of comfort and relaxation mostly because it reminded most respondents of nature. Due to its link with vomit and ability to evoke sentiments of disgust and sickness, the color green-yellow had the lowest percentage of positive results.) underlined the significance of consumers' natural preference for the color white over black in advertising. The authors used several Implicit Association Tests throughout the three-part study to assess automatic preferences for colors, races, items, and commercials.

According to the survey, e-commerce websites that sold goods that did not adequately reflect the colors of those goods were losing revenue and customers. Customer service and reverse logistics expenses may increase as consumer dissatisfaction increases.

3. OBJECTIVES -

1. Analyze respondents' gender-based color preferences.
2. To Offer Guidance on the Strategic Use of Colors in Advertisement and Branding.
3. To ascertain how color affects consumers' decision-making.
4. To Determine How Color Affects Price Perceptions Examine the Psychological and Emotional Reactions Triggered by Various Color Palettes.

4. HYPOTHESIS -

The following alternate hypothesis has been adopted in light of the goals of this study and revelations from the literature review:

H1: The respondents' gender-based color choices varied significantly from one another.

H2: Color has a big impact on what consumers decide to buy.

H3: Colors have a big impact on the brand remember.

H4a: Customers' intentions to acquire products with warm colors and cold colors differ significantly.

H4b: Customers' intentions to acquire products with warm colors and neutral colors differ significantly.

H4c: Customers' purchasing intentions for products with cool colors and neutral colors differ significantly.

5. METHOD RESEARCH METHODOLOGY -

The present study's research design was descriptive, utilizing both primary and secondary data sources. Secondary data was gathered online using search terms like "color perception," "color meaning," and "color and behavior" from databases like Emerald, ScienceDirect, and Taylor & Francis. In-depth information was gathered via questionnaires.

5.1 Sample Choice -

Using convenience sampling and non-probability, 250 participants were provided with the survey form for an online survey. 250 people were interviewed, and 225 responded with a 90% response rate. These responses were used for further analysis.

5.2 Data Sources -

Primary data was gathered via a survey method. A review of the literature was done, and the information it provided was used to formulate the research questionnaire, which was made up of closed-ended questions. The data was gathered using the free survey tool Google Forms. Closed-ended questions with a Likert scale of 5 points, from extremely disagree to highly agree, were included in the first section of the questionnaire. In the following section of the survey, digital images of a product (shown in Figure 1) were used. Each image was digitally altered using Adobe Photoshop to create multiple images, two of which were of warmer hues (yellow and red), and three of cooler hues (green and blue).

5.3 Equipment Used in the Study

Data were analyzed using statistical software after questionnaires were checked for completion and missing data. SPSS, version 23.0. ANOVA, mean, standard deviation, and percentage were among the statistical tests performed.

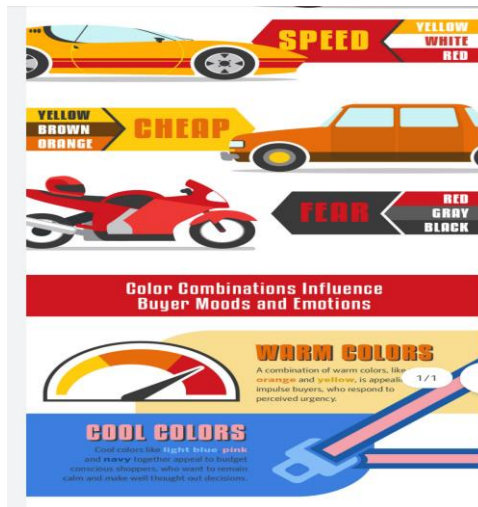


figure 1. Seven images of a product in different colors

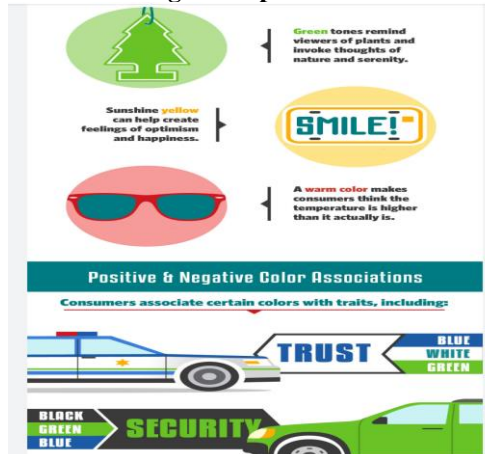


figure 2. Banner in different colors

6. Analyzing data –

demographic information

When the demographic data was analyzed, it was discovered that 56.4% of respondents were female and 43.6% were male. The majority (67%) of responders were in the 20 to 30 age range. With 476 and 396 replies, respectively, the majority were either employed (military members) or students.

7. Reliability -

Cronbach's alpha was found to be 0.868, which is higher than the required value of 0.7 and indicates a high level of reliability (**Hair et al., 2010**).

study of consumer preference for product color –

According to the respondents, blue was their favorite color (31%) and yellow was their least favorite color (3%); this finding is consistent with other studies (**Bellizzi and Hite, 1992; Tangkijwiat and Shinoda, 2008; Westland and Shin, 2015**). Additionally, it was shown that black was substantially more desired by men than by women and that pink was significantly more preferred by women. According to the respondent's gender, Figure 3 breaks down product color preferences.

table . 2 descriptive statistics

Statements	Mean	Std. Deviation
Colors Mean Rating of Warm vs. Cool Colors	3.82	.91
Color's Impact on Personalization and Customization	4.06	1.09
Color Response in Social Media Advertising	4.19	.97
Color Symbolism and Product Messaging	3.60	1.07
Color Preferences in Environmental Sustainability Campaigns	3.95	.99
Color in Influencer Marketing:	3.76	1.03
Influence of Color on App and Interface Design	3.80	1.02
Color Preference and Product Trustworthiness:	3.84	.94
Perceived Suitability of Colors for Different Product Categories	3.38	1.21
Frequency of Color Preferences	3.83	1.02
Age Group Analysis of Color Appeal	3.27	1.27
Effect of Color Change on Rebranding	3.75	1.13
Color and Brand Storytelling	3.40	1.10
Consumer Perception of Limited Edition or Seasonal Color Releases	4.00	.97
Color and Brand Loyalty:	3.86	.98
Color Preference in Online Marketing	3.64	1.13

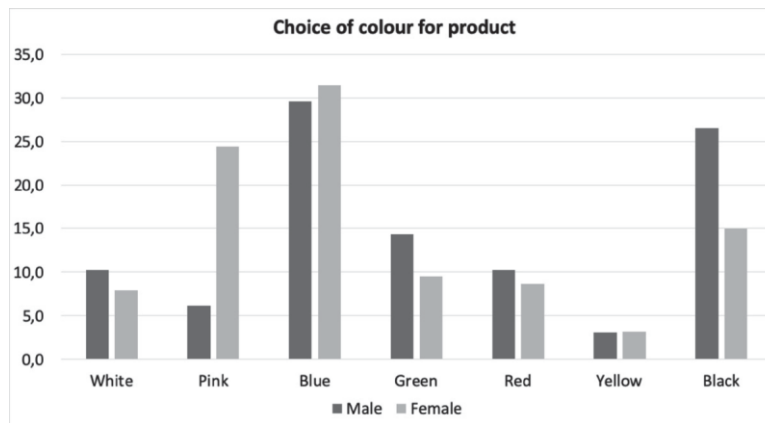


figure 3. Selection of color for product based on gender.

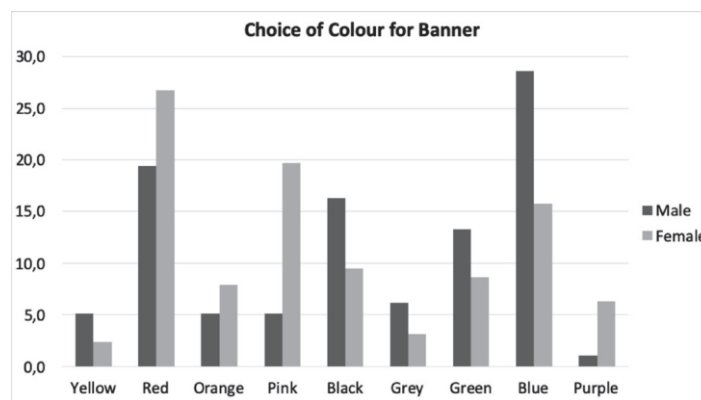


Figure 4. Selection of banner based on gender

Analysis of preferred banner colors -

Red was the color most frequently chosen for the banner (24%) while yellow was the color least frequently used (4%). Warm colors (red, pink, and orange) were discovered to be more favored by women, whilst cool colors (green, and blue) were more favored by men. According to the respondent's gender, Figure 4 breaks down color choices for banners.

table 3. Independent sample t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Choice of Product	Equal variances assumed	2.432	.120	2.619	223	.009
	Equal variances not assumed			2.589	198.803	.010
Choice of banner variances for a retail outlet	Equal variances assumed	.038	.845	1.836	223	.050
	Equal variances not assumed			1.834	208.108	.050

Source: Survey by authors

8. Influence of color on customer decision-making and brand recognition –

To determine whether there was a connection between color preferences, purchasing behavior, and brand recall, Pearson's correlation was used. All three variables were shown to be significantly correlated with one another. Further regression analysis was used to determine the impact of color on purchasing decisions because there was a substantial link. According to the findings, color significantly (.587, $t=10.836$, $p.001$) influenced purchase decisions and predicted a 34.5 percent variation in those decisions. Similar outcomes were observed in earlier research where the background color of a retail display—blue rather than red—influenced purchasing decisions, increasing the intention to buy in a shopping environment (Belize and et al., 1992). According to Labrecque and Milne (2012), perceptions of brand personality impacted by color can have an impact on consumer decisions. Another study discovered that color is employed as a selection criterion when purchasing

fashion accessories as well as a factor in customer happiness after receiving the item (Nitse et al., 2004). The findings of this study complement those of earlier studies regarding the role of color in influencing purchasing decisions. As a result, hypothesis H2 was approved. Regression analysis was once more used to investigate if brand memory was influenced by color preference. Hence, hypothesis H3 was accepted.

Different colors' effects on consumers' purchase intentions

Customers' purchasing intentions for various color groups were subjected to an ANOVA (warm, cool, and neutral). The test statistic in Table 5 is 4.202 at a 5% level of significance and a 0.016 p-value. As a result, it was determined that customers' purchasing intentions for the various color groupings are varied. As a result, hypotheses H4a and H4b were accepted, whereas H4c was rejected.

To comprehend the underlying differences, posthoc analysis utilizing LSD (Least Squares Difference)

Table. 4 correlations

		Purchase Decision	Color Preference	Brand Recall
Purchase Decision	Pearson Correlation	1	.587**	.541**
	Sig. (2-tailed)		.000	.000
	N	225	225	225
Color Preference	Pearson Correlation	.587**	1	.669**
	Sig. (2-tailed)	.000		.000
	N	225	225	225
Brand Recall	Pearson Correlation	.541**	.669**	1
	Sig. (2-tailed)	.000	.000	
	N	225	225	225

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Internet Source

Table 5. ANOVA purchase intention for different colors

	Sum Squares	of	df	Mean Square	F	Sig.
Between Groups	4.967		2	2.483	4.202	.016
Within Groups	131.193		222	.591		
Total	136.160		224			

Source: Internet source

Table 6. Multiple comparisons

(I) Colour	(J) Color	Mean			95% Confidence Interval	
		Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Neutral	Cool	.06348	.11648	.586	-.1661	.2930
	Warm	-.39954*	.17377	.022	-.7420	-.0571
Cool	Neutral	-.06348	.11648	.586	-.2930	.1661
	Warm	-.46302*	.15995	.004	-.7782	-.1478
Warm	Neutral	.39954*	.17377	.022	.0571	.7420
	Cool	.46302*	.15995	.004	.1478	.7782

*. The mean difference is significant at the 0.05 level. Dependent Variable: Purchase Intention

Method used: LSD

Source: Internet source

Table 6. illustrates the information about Examining the feelings that are created by warm, cold, and neutral colors to see how they relate to the intention to buy. Cool colors, on the other hand, may be connected to serenity, trust, and dependability, which may influence long-term purchasing considerations. For example, warm colors may arouse feelings of excitement, energy, or urgency, thus driving impulsive purchases. Examine the connection between color associations and brand loyalty. Warm colors may elicit increased brand loyalty because of emotional ties, which may influence recurrent purchases, but cold or neutral colors may indicate stability and dependability, which may influence sustained buy intention.

9. RESULTS AND DISCUSSION -

The findings of the current study demonstrate that color influences consumers' decisions on which things to buy significantly. This fact was also noted in earlier studies when it was found that the color of a product, advertising, or shop setting significantly influenced consumer behavior. Through this survey, it was discovered that among both males and females, blue was the color most preferred, and yellow was the least. For selecting a banner...

The results for advertising material) were likewise consistent, with blue being the most favored (although red was a close second) and yellow being the least.

The results point to a complex interaction between purchasing intention and color psychology. Warm hues frequently elicit strong feelings quickly, which encourages impulsive buying. Nonetheless, cold and neutral hues have a noticeable effect on consumers' longer-term purchasing intentions, especially in situations where dependability and trust are important factors.

Comprehending these correlations between colors facilitates smart marketing. Warm colors, for example, might be used to encourage hasty, impulsive purchases, whereas cool or neutral hues could be used for goods or services that demand dependability, trust, or sophistication.

The study emphasizes how crucial it is to take cultural differences in color perception into account when creating marketing strategies for a worldwide clientele. Furthermore, the correlation between color and brand identity is revealed to be a crucial element impacting The results demonstrating the complex relationship between neutral, cool, and warm hues and buy intention, providing marketers with useful information to adjust color schemes according to consumer behavior and product context.

10. IMPLICATIONS FOR MANAGEMENT -

There are various marketing ramifications of this study. First, as part of their marketing plan for their products, marketers should take into account the color of the packaging, the color of their product, and any other colors connected to it. The current study suggests that, with the development of efficient data collection techniques, knowledge about consumer preferences for specific colors might be used to alter product offerings, thus increasing the likelihood of an increase in sales. The use of contrasting colors can also help products stand out more on store shelves, but only if they are appropriate for the product category in question.

CONCLUSION -

Although color associations and meanings have been the subject of numerous research. To determine whether color influences consumers' choice of products, this study also used correlation and regression analysis. It was discovered that color has a significant influence on consumers' choices, which led to the acceptance of the second hypothesis. It is a potent trigger for developing and maintaining business identities. Another crucial conclusion of the research.

Launching fresh-colored product lines has been shown to increase brand remember (**Garber et al., 2000**), and Pepsi has experimented with creating new color associations by switching from the traditional red color associated with cold beverages to blue (**Grossman and Wisenblit, 1999**).

To sum up the conclusion,

The consumer's buy intentions for warm and cool colors as well as warm and neutral colors varied significantly, but there was no discernible difference between the purchase intentions for neutral and cold colors. Because the first two components of this hypothesis were accepted, the fourth hypothesis was also partially accepted.

According to every customer, color is the first preference to buy any product. Therefore, color can play a vital role in customer behavior.

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