# A Psycho-Linguistic Exploration of Color Semantics 

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#### Abstract

The purpose of present research is to identify variety of meanings imparted by colors and its effects on emotions and moods. Traditional literature is linguistically intertwined with explication of colors and their meanings spurring from imaginative spheres of human mind to determine their moods. The present study delves deep into psycholinguistic perspectives of color, mood and language and thus invites causal profile of exploration. Communicative qualities of colors strengthen their grounds on the basis of cultural, social, historical, affective, political and linguistic compasses therefore interpret a variety of connotations having expressed in the form of moods. In this study, survey technique was employed through questionnaires to gather relevant information. Both closed-ended and open-ended questions were included to ensure validity. Data were gathered from a random sample of 100 respondents including males and females. Non-Probability Quota sampling technique and statistical analysis were used for analyses. The questionnaires were distributed in Pakistani academic institutions. This reveals that colors convey different connotations which are expressed by means of language and types of moods.


Keywords: Color, Connotations, Mood, Psycholinguistics

## 1. Introduction

Colors reflect meanings through linguistic symbols by mirroring everything which could be visualized. Ancient literatures highlighted color projection as an essential part of life. Colors exercise deeper effect on emotions and feelings of human beings. Mood is generally an amalgamation of such several constantly changing emotions which are quite often expressed in the form of language and gestures. Thus language and colors together help determine type of mood. Mother Nature fabricates the most fundamental sources of color symbolism. Looking at blue color of sky adds to sense of relief, hope, spirit and truthfulness. Similarly, all colors have profound meanings which are usually symbolic. Colors often or seldom, are indicative of inner self, mind, psychological trends and aptitudes of human beings. In the color wheel, a person can envision merely colorful objects, calculates surroundings through unconscious psychological mechanisms and chooses appropriate words, lexis, vocabulary, sentence structure or tone to describe his exact perceptions. Colors owe certain efficacy to gauge temperature of environment which un/consciously affects language and behavior. Such as Red, Orange and Yellow are assumed to be warm colors whereas others like Blue, Green and Violet impart cooling effect. There have been different reactions observed in response to exposure to different colors in daily life activities. Similarly, color symbolism has been used at great length by the writers, poets and literary artists in their works profusely. Thus, colors are not merely descriptions in language to provide a rationale behind certain mood and behavior arisen in a specific situation, instead colors give vitality to the hackneyed social settings. Ample research has suggested that colors can affect a person's mood and language. Human mind adjoins color chemistry with orifices of nature. The visual cues sketch out blueprint of prospective upshot by interacting with inherent particles of unconscious mind. Meanings are translated, conceded and learnt through color impressions. A linguistic headway is transmuted as to infer ultimate meaning of colors concluding in tampered mood expressions. According to colloquial English expressions, a brief list of colors and their psycholinguistic connotations has been discussed in the following.

Blue color is associated with tranquil, harmony and relaxation. It represents peaceful things such as "clear Blue Ocean" and "blue sky". Conversely, blue is also associated with meaning of masculinity and is the preferred male clothing baby color. Mostly men choose blue as their favorite color. In addition to the soothing properties, negative connotations such as "depression or sadness" have also been associated with blue color e.g., "having the blues", "caught between devil and deep blue sea". Overall the mood is calm and subdued. The color pink is associated with youth and femininity. It is a "young" color that represents blushing and flower petals especially rose. It is meant to set a romantic mood. Red is associated with love and passion. It also signals energy and power. Some people find that wearing or seeing the color red invigorates them. This color sets an exciting mood. On the opposite edge, red is symbolized using negative words like "destruction", "warning", "danger",
"war", "sex", "sin" or "murder". The color black is associated with words like "death", "fear" and "the unknown". Black color is traditionally worn by mourners and seen at funerals. This is also associated with "elegance", "grace", "purity" and "goodness". As it shows up impurity so easily, it invites scrutiny. It is the color that "goes with everything" i.e. "can do no wrong thus white is a color of peace which gives one comfort introducing to the brightness as opposed to darkness of black. Yellow is a bright color that is often described as cheery and warm. Yellow is also the most fatiguing to the eye due to the high amount of light that is reflected. Yellow can also create feelings of frustration and anger. While it is considered a cheerful color. Green color represents "rebirth" and "sanctity". Being the color of grass, trees and money it signals "fertility and (along with gold) wealth". It is a friendly color and many people feel a healing power from this color. It sets a mood of nature and growth. This situation promotes rationale of the study to explore causal effect of colors sight on moods and its expression by using particular language and words.

### 1.1 Objective of the Study

The objective of present research is to explore psycholinguistic relationship of different colors, moods and their expression in the form of specific language.

### 1.2 Research Questions

The main research questions were:

1. What is psycholinguistic relationship between colors, their effects on mood and language choice?
2. How do certain colors shape and what type of moods?
3. How are meanings of color constructed moods interpreted in a specific form of language?

### 1.3 The state of the debate

The psycholinguistic exploration of present study, answers how certain colors affect certain moods to express specific language or vice versa. It is further important to determine which color possess which mood and what specific words, lexis, phrases or sentences are generally used to express them. Generally, it is widely observed that colors exercise specific impact on human mind thus colors have characteristic quality to change moods. These moods are eventually articulated in the form of special words and choice of language. Colors may have positive or negative effects leading to choice of both possible types of words. It involves inherent psycholinguistic mechanism which assigns "certain words to certain emotions" collectively naming it mood. The present study was narrowed down owing to the expansive nature of color philosophy and inherent complex of psychological and linguistic framework. The effects of six different colors on the participant's psycholinguistic state of mind, disposition, choice of words, interpretation of meaning to determine a specific mood have been taken into account. The fundamental colors as black, white, red, yellow, blue and green are center of study. Presumably, these colors in different shades of intensity cause a certain mood or are responsible for plethora of moods which are patently expressed by employment of specific choice of words and utterances. Evaluation of idiosyncratic linguistic responses towards each color will help analyze psychological reaction to a certain color. The principal ideas running through emblem of color psychology and its linguistic determination of moods explicate that colors affect one's mood. They might differ based on what factors contribute to this phenomena such as culture, social settings, literature, traditions, values, customs, choice of language, words, lexis, opinions, and in fact what goes on inside one's mind. One of the assumptions is that colors affect mood based on one's personal opinions thus idiolect has its incontrovertible role. If a person dislikes the color pink, he/she may associate pink with hatred as to express mood /feeling of hatred, mild to grave words may be chosen. Another idea supports that color affects mood based on one's culture which is inherited by means of language. The resultant mood thus seems to be subjective to cultural paradigms. To explain, someone from the U.S. may think of the color green when referring to word "envy", while people in Japan think of yellow in connection with "wanting what someone else has". Hence, difference in choice of words may be contradictory either as meaningful morpheme or as phrasal expression. The interactive mechanisms of psycholinguistic and psychophysical planes have their principal role to determine moods and language expressions. Upon seeing the color blue, calming chemicals are released in body creating soothing effects which in turn makes one feel calm. $\mathrm{He} /$ She may choose polite and beautiful words to express this mood. Similarly, yellow is the hardest color for the eye to focus on, people may become irritated when looking at yellow and use aggressive language. Studies show that babies cry most in yellow nurseries. One the other end, yellow was assumed to be at one point in history, a color to boost ideas and creative language therefore writers preferred using pens painted in yellow color. These assumptions and observations pave way to explore relationship amid colors, moods and linguistic choices.

## 2. Literature Review

The domain of color has furnished empirical locus classics of the debate for the last half-century. Colors names
do influence color perception - but primarily in the right visual field, and less so in the left. Color naming across languages does reflect universal tendencies, but also some degree of local linguistic convention. This suggests a way in which the recently re-opened debate over language and thought in the color domain might be resolved. And to the extent that these findings generalize to other semantic domains, to provide possible resolution of the Whorf's debate. Language affects color perception primarily in the right visual field probably via activation of language regions of the left hemisphere, and that color naming reflects both universal and local determinants. It suggests novel perspectives on the relation of language and color perception. Research probed the perceptual discrimination of colors straddling the boundary between green and blue, a boundary present in English but absent in many other languages. The discriminating colors of different lexical categories (versus the same category) have elicited faster and stronger response in the left hemisphere language regions, especially when the colors were presented in the right visual field. Thus, the eventual effect of socially transmitting language across generations is that language itself takes on the form of the learning bias in each learner's mind; in the case of color naming, this would be our prior expectations concerning the shape of color categories (Regier\& Key, 2009). Similarly, color is pervasive and the extant literature has ample studies on the affective reaction to color (Osgood \& Adams, 1973). If the affective reaction to color truly influences memory, then we can effectively use color in the presentation of information in training and learning environments and also improve the design of human computer interfaces. Individuals in a depressed-mood may not use language effectively as same as individuals do in a happy mood. Some colors have been associated with positive emotions while others are said to induce negative emotions which further affect choice of words in language. Several studies have investigated the affective reaction to color in the form of language use (Guilford \& Smith, 1959).

Under explicit expression of emotions, communicants usually understand what emotion the person expresses or wishes to demonstrate, but there are a lot of speech and non-speech situations when one has to guess about the emotions the interlocutor is experiencing. In linguistics there is the dichotomy between implicit vs. explicit notions where the first refers to unspoken, implied and contracted opposed to expressed and expanded accordingly. Explicit manifestation of emotional state by means of phrases with their color designation is extremely rare (to be purple with rage u go/turn white with rage) (Mullagayanova, S., G., 2013).The immune system detects elements of the environment, such as color, that elude other senses .Colors may just seem simple and unimportant, but they affect our word choice more than we may know. There are many theories on how just a simple color can change one's whole mood and language (Marberry, 1995). The effect color produces is based on what one's body does in response. For example, yellow is mentally stimulating, and activates memory, whereas red increases confidence. Also, brown can make a person feel orderly and stable, while a dark blue can make one feel sad. Hence, different colors do in fact change one's mood and the consequences can be negative or positive expressions of language and words or vice versa (Smith, 2007).

Color can affect one's mood, but the effect also can depend on one's culture and what one's personal reflection may be. For example, someone from Japan may not associate red with anger, as people from the U.S. tend to do. Also, a person who likes the color brown may associate brown with happiness. However, colors can make everyone feel the same, or close to the same. Pink reduces aggression, which is why the walls of the jail cells in the Seattle prison are pink!. Thus, colors do affect one's mood and language, but there are other factors that can alter what one is supposed to feel (Wollard, 2000). Linguists distinguish comparative-historical investigation of color vocabulary (evolutionary trend), psycholinguistic component of color namings, cognitive aspects, linguistic-cultural and nominative-term formation aspects of investigation of color vocabulary. Some scholars suppose that use of identical color namings in lexical and phraseological units of different languages arises due to the usage of the main and significant colors in ethnos's life: "Prevalence of one and the same color namings in lexical and phraseological units of different languages refer to the fact that they are the main and the most necessary colors of certain ethnic community: "If we want to understand each other, such words as black, white, red, yellow, green, blue are sufficient for expressing our feelings". Significance of color semantics as culture component has complicated and various sacral system of senses, interpretations for every nation and becomes embodiment of definite cultural values. Consequently, color namings can be represented as linguistic cultural phenomenon which affects moods, behaviors, attitudes and dispositions of people in general (Mazhitayeva, S.,\& Kaskatayeva, Z., 2013).

## 3. Methodology

### 3.1 Data \& Variables

The methodological framework for this study included an exploratory as well as causal research paradigms. Exploratory research was conducted to gather information regarding objectives of study which surround identification of psycholinguistic relationship between color semantics and manifestation of color constructed mood language expressions . Causal research emphasized the effects of colors on mood leading to specific language/ word choices. For this, males and females were taken as a sample. Non-Probability Quota sampling technique was used and thus statistical analysis was done. Qualitative research was conducted through
questionnaires.

### 3.2 Sample and Sampling Technique

Survey was carried out through questionnaires which covered questions concerning the information sought. Mostly the questions were close-ended whereas open ended questions were included to get a better insight. The sample of study included 100 respondents. The questionnaires were distributed in academic institutions of Pakistan in the Sind province. The research was further delimited to the only sample who had sense of color sight.

### 3.3 Model

The study follows Modal Frequency i.e., a descriptive statistics model to collect opinions of respondents. It follows an option which showed the highest number of responses.

## 4. Data Analysis and Results

4.1 Modal Frequency Analysis of the Responses in regard to psycholinguistic study of color semantics

| No | Variables | Sub variable | Frequency | \% <br> Frequency |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Gender | females <br> males | 84 <br> 16 | $84.0 \%$ <br> $16 \%$ |
| 2 | Age | $20-25$ | 55 | $55.0 \%$ |
| 3 | Color clothes | black | 31 | $31.0 \%$ |
| 4 | Mood | calm | 35 | $35.0 \%$ |
| 5 | Effect of colors on mood, use of positive words | yes | 81 | $81.0 \%$ |
| 6 | Red as warmth and lovable color, use of positive words | yes | 60 | $60.0 \%$ |
| 7 | Black as depressing color, use of negative words | no | 90 | $90.0 \%$ |
| 8 | Green as calming and refreshing color, use of positive <br> words | yes | 86 | $86.0 \%$ |
| 9 | Yellow feels anxious, use of negative words | no | 54 | $54.0 \%$ |
| 10 | Blue as calm relaxed color, use of positive words | yes | 69 | $69.0 \%$ |
| 11 | Pink as innocent color, use of positive words | yes | 74 | $74.0 \%$ |
| 12 | Color cause eyestrain, use of negative words | yes | 64 | $64.0 \%$ |
| 13 | Which color cause eyestrain | florescent <br> orange | 31 | $31.0 \%$ |
| 14 | Purple represents royalty luxury, use of positive words | yes | 77 | $77.0 \%$ |
| 15 | Brown symbolize simplicity, use of positive words | yes | 52 | $52.0 \%$ |
| 16 | Blue green as cool color, use of positive words | yes | 89 | $89.0 \%$ |
| 17 | Color give you comfort, use of positive words | white | 34 | $34.0 \%$ |
| 18 | orange as playful color, use of positive words | yes | 72 | $72.0 \%$ |
|  | Ous of to0 |  |  |  |

- Out of the 100 people sampled, about $81 \%$ i.e. 81 respondents believed that colors had affect their moods. So we can't deny that color and mood are inextricably linked.
- $60 \%$ respondents believed that they felt sense of warmth and lovable by seeing red color. For them red was color of love. $40 \%$ of the respondents disagreed and believed that red created negative emotions.
- $90 \%$ did not feel depressed in black, it meant that most of respondents liked the positive side of black color i.e. elegant and to a state of grace.
- Out of the 100 people sampled, $86 \%$ respondents believed that green was calm and refreshed them which put them in a relaxed mood.
- $54 \%$ respondents did not feel anxious in yellow room. They found yellow as a cheerful color.
- Out of the 100 people sampled, about $69 \%$ respondents felt calm and relaxed in blue color.
- $74 \%$ believed that pink was an innocent color. And this was a color for girls.
- Out of 100 people sampled, about $64 \%$ respondents believed if they caused eyestrain due
- to any color hence $31 \%$ respondents believed that florescent orange caused eyestrain.
- $77 \%$ of the respondents believed that purple represented royalty and luxury.
- Out of the 100 people sampled, $52 \%$ respondents believed that shade of brown symbolized simplicity and structure.
- $89 \%$ of respondents defined blue as a cool color. To them blue color Symbolized nature and the natural world.
- Out of 100 people sampled, $34 \%$ respondents believed that white color gave comfort. It was a color of
peace.
- $72 \%$ respondents believed orange was cheerful color.


### 4.2 Discussion

According to the analyses based on qualitative information provided, the majority of respondents believed that color constructed moods nominations were highly related with the inherited knowledge of language. Red and black were considered the most pertinent colors. Both positive and negative meanings were suggested in regard to color, moods and language expression. Pink color carried positive effect for example "baby pink", tickled pink". In pink color mood became innocent and pleasant. Quoting examples, it was stated that the meaning of idiom "to see red" provoked negative emotion which was used to describe a feeling of "anger", sadness", overreaction", "jealousy", "remorse" and so on. Similarly, green color exercised both positive and negative emotions in terms of green color however the majority of respondents believed green was a "sacred" "spiritual" "refreshing" color. For them, first thing that came to mind related to green was "green grassy fields" which denoted life to them.

Most of the respondents suggested that their store of knowledge in the form of language dictionaries and personal experiences with certain situations developed positive or negative connotations of colors in their minds. Hence whenever, they were exposed to those particular in certain situations, they chose parallel connotations and words to express their love or hatred. They agreed in shaping their minds about color nominations and effects on moods lexicography have its important role. In lexicography, one word has been given with many synonyms. If black and blue colors made them feel down the reason was that prior to their inductive learning process and self-experimentation, dictionary had already shaped their opinions pertaining to those colors. Mentioning the words "black dog" blue devils' blue funk" "the blues" "feeling blue" and "blue study" respondents stated that black and blue represented dark side of life. They associated it with several synonyms (e.g., unhappy dump, tribulation, woe, sorrow, heavy heart, hopeless, melancholy, dysphoria, distress, broken heart, gloomy, dejected, dolor, dolefulness, despondency etc.) to explicate relevant moods what they had already imbibed in memory. Therefore, that readymade socio-psychological makeup of lexical associations in terms of colors nominations further helped them form opinions.

## 5. Conclusion

To conclude, study reveals that colors affect mood in both ways i.e., either this is because of their previously instilled knowledge through language which helps identify effects of colors on mood or the colors themselves affect mood which is further followed by peculiar word choice. Different colors have different types of symbolism hence every color can have various connotations. Certainly, colors and prejudice is a great topic for debate amongst psychologists and linguists. Red may generate mood and words of love/ affection or threat/ danger, white gives comfort, orange makes a person cheerful or irritated, blue and green make calm and relaxed at one side whereas on the other, may carry negative connotations. Some like Brown color to show the symbol of simplicity. Purple to feel them like royal, black doesn't make a man depressed but put them in the state of grace and elegance. Some feel anxious in yellow others find it creative. Some get eyestrain due to florescent orange. So everyone has one's own mood in regard to different colors. Since colors and their meanings are conveyed in a fixed social setting, everyone comes up with one's individual perception and opinion about why he/she dis/likes a color and what factors may be involved to exercise their effects on moods. These results open up a new arena for further discussion and intensive study of color, moods and their linguistic interpretations. Culture, language, psychology, sociology, religion, mythology and subjective experiments define a specific emotion which goes through Semantic processing of multiplied internal chemical mechanisms of human mind. Colors give light to life that is illuminated from sun. A sense of literary binaries and philosophical boundaries in literature of humankind can be distinguished with the help of colors. Colors are limitless in nature as Mother Nature has been beautifully attired with colors. Language expressions, choices of words and interpretations of meanings are manifestations of color-constructed human moods. Hence it may be supported that colors enrich esthetics of human mind and language embellishes nominations of moods. Colors affect moods and envisage linguistic constituents or vice versa. All colors have positive and negative connotations which have deep relationship with consciousness of moods and language.

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