



## The Psychology of Color in Psychotherapy in Psychiatric Rehabilitation Hospitals

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### Abstract

There is a lot of dynamism in the interaction between color and the surroundings we live in. It influences our emotions and behaviors in addition to aiding in the definition of our private areas. In the world of medicine, color is just as significant as possesses the capacity to soothe and heal. To find out exactly how color may affect our mood, a brief poll and a study of the literature were used. Even if more study and earlier studies have been done, the results were further corroborated by the use of a fresh survey. Cool hues, according to earlier study, help patients feel at ease and at ease in their surroundings. According to experts and students who responded to the poll, blues and greens evoked thoughts of relaxation, contentment, and cleanliness. These outcomes, among many others, contribute to the development of the perfect medical setting. This study may also be used to develop a strong foundation plan for new medical offices and to redesign current medical facilities in the future.

**Keywords:** Color psychology, Psychotherapy based on color and Psychiatric asylums, color and emotions.

### Introduction

The nation's structure is based on public health, both physical and psychological, and mental health is essential—possibly more so than physical health because it influences the former both directly and indirectly. Additionally, the internal and external environments have an impact on therapeutic spaces and all the elements they contain. Psychopaths might have a negative or positive attitude. As such, an interior designer is crucial in creating a proper treatment environment that improves the patient's health and appropriately supports the therapeutic process.. [1]

Color therapy, commonly referred to as chromotherapy, is an alternative medicine that balances the body's energy centers, or chakras, using color and light to cure physical or mental health issues. This idea originated with the ancient Egyptians, who employed medicinal sun-activated solarium chambers made of tinted glass 5. These days, art therapy—which, of course, involves color—has brilliant promise that is acknowledged by both conventional and alternative practitioners. Moreover, fans of color therapy are ecstatic about

its impact even if it is still a murky area in Western medicine[2]

Both a characteristic of light and a living energy is color. Everything in nature is colorful because light, which is electromagnetic energy created by the sun in various wavelengths, is absorbed and reflected. In life, everything is made of vibration. All that exists in the cosmos is energy in motion. 6. Charkas, or energy fields, are present in our bodies. Atoms are vibrating and make up every organ in the human body. Everybody has a different energy system, and the vibrational patterns of their organs vary. Each of us emits color There are two types of particles in light: photons and microwaves.

Everything is illuminated, even our bodies. Additionally, light emits ultraviolet (or invisible to humans) wavelengths. Energy in the form of radiation is present at these wavelengths. Life and Qi are energy. It is now clear that a wave's hue is determined by its length. There are a vast number of waves with various frequency characteristics in our surroundings. [2]

An all-natural, non-invasive treatment that promotes mental and physical well-being is color

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therapy. In color therapy, the color vibrations enhance your general well-being and mood.

The components of color are reflected light waves that vibrate and strike our retinas. Because of how our brain perceives these wavelengths, color is ultimately seen as a physical and sensual experience. [2]

### The Science of Colour Psychology

The psychology of color significantly influences design decisions in the marketplace. Color psychology applies to many facets of design, from efficiently branding your product to creating an environment that motivates service users. [3-11]

According to studies on the power of color, a brand's color scheme alone has the power to attract or repel customers from a business, good, or service.

Ninety percent of product judgments are based only on color, according to Psychology Today.

First impressions are influenced by color. Choosing the appropriate color is crucial since it's the first thing we notice and the last thing we remember. Thus, this is how color psychology's science operates. You'll be able to choose colors for all of your product designs after you comprehend this.



**Figure 1:** An image showing the shape of the color wheel

Colors are usually too influenced by individual experiences to be generally understood. This implies that generalizations and specific assertions like "red reminds people of passion" are not possible. Because red evokes diverse memories for different people based on their ever-changing experiences and passions.

But studies have shown that there are wider trends in the emotions that different colors arouse. These are predicated on cultural norms and preconceptions that, despite constant change, elicit

comparable associations for sizable populations (for example, blue denotes Conservative and red denotes Labour).

According to recent study, people are predisposed to certain colors. It's critical to consider context while designing since, although the color "brown" has various meanings, they differ greatly depending on whether it's used with wood, brick, or sand. Everything is subject to personal interpretation. [12]

### How We Perceive Colour

Three factors determine our perception of colour: hue, value, and chroma.

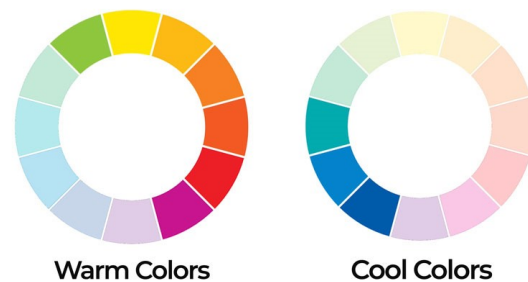
- **Hue:** Hue describes the general color, such as purple, yellow, or blue. Product centering solely on color is a typical design error. The role of value and chroma in emotional resonance is significantly greater.

- **Value:** Value refers to the brightness of a colour. The brighter a color, the higher it's value

- **Chroma:** The term "chroma" describes how saturated or vibrant a color is. A color's chroma increases with its vibrancy. [12]

### The Psychology Behind Colour Preference

We utilize the hue, value, and chroma of a color after learning about it to form color preferences. Preference for color is usually determined by three factors.



**Figure 2:** An image showing the color wheel of warm and cool colors

### Analysis and Discussion

How Colors Affect Emotions is the name of Doris Jeanette's experiment. It covered the reasons why color affects human emotion. It claims that hue and feeling possess a certain wavelength at which they are both physically present. They can have an impact on one another since they both exist in a wave-like manner. This post explains in seven sections why and how color affects our emotions. [13]

## Emotions

The first section discusses the idea that emotions are colors and how color and emotion are related. In their publications, other academics have gone into further detail about the connection between color and emotion. Compare this to the article: Color's impact on emotions: An analysis and color combinations on people's emotions, according to Leon According to Miguel G. Gonzales and Cherry (2020), the emotional responses that people have to various hues vary. The three pieces, however, concentrate on various viewpoints. According to Jeanette (2004), emotions and colors are intertwined since they are both forms of energy. People's emotions are formed of colors on a physical level. In fact, those who are able to view the energy field experience emotions as distinct colors. These individuals truly perceive fluffy, little clouds of color floating in the atmosphere surrounding their bodies. Typically, these mists of "colored balls" and "colored clouds" linger in the energy field's so-called emotional bodies like mist, and these. [14]

People's emotional bodies were located around 1.5 feet from their physical bodies. Cherry (2020) just concentrates on blue. Blue is a chilly hue that is typically associated with the sea or the sky. People may thus associate these hues with the sea or the sky and feel at ease and at peace when they see them. Thus, blue happens to be a hue that many people like. Many individuals find blue to be a pleasant hue, thus it's often considered as non-threatening. But blue may also evoke feelings of melancholy and remoteness. [15]

## Color affects on Mood

We are unaware of the greater influence that color has on our life. It can have an impact on our bodies, thoughts, and general mood. While some people have subjective perceptions of color, some hues are universally associated with particular objects. Warmer hues are those that are near the red spectrum, such as red, orange, and yellow. Emotions ranging from sentiments of coziness and warmth to enmity and rage are evoked by these warm hues. On the other hand, blue hues like green and purple are associated with feelings of serenity, melancholy, or apathy. to become knowledgeable about various hues and their effects on you. [16]

## Benefits of Color Therapy in Healthcare

In many different sectors, color theory is employed to affect how people act and think in certain settings. Color theory is utilized in healthcare to design spaces that are inspirational, calming, and safe. According to Healthcare Design Magazine, color theory is frequently applied to hospital design to promote: [17]

Patient healing and motivation  
Facility efficiency and efficacy  
Healthcare staff motivation and efficiency [18]

## Understanding Color Theory

According to color theory, a person's physical and mental well-being may be impacted by the colors they are exposed to. The foundation of color psychology is the hypothesis that a sighted person's emotional state and maybe even their physical health can be impacted by the colors they are exposed to.

According to color theory, every hue, from white to black and all shades in between, has an impact on a person's behavior, thoughts, and reactions to external stimuli. [17]

## Colors and health: the importance of colors in hospitals

Colors have the power to affect our feelings, attitudes, and actions. Different colors have been shown to have physiological and psychological affects on humans by science. Thus, the experience of patients, medical personnel, and visitors may be greatly impacted by the colors used for hospital facilities. [19]

## Color psychology and its impact on patients' mental and emotional health

The study of color psychology looks at how various hues might impact our feelings, attitudes, and actions. People's psychological and physiological reactions may be elicited by colors, and when used appropriately in healthcare environments like hospitals, colors can significantly influence patients' mental and emotional well-being.

In a medical setting, the colors used can have an impact on how patients feel about their experiences and how they feel overall. For instance, the following particular hues may have an impact on a patient's mental and emotional well-being: [19]

- BLUE: Blue is frequently linked to peace, tranquility, and calmness. It is a hue that has been utilized in healthcare settings to create a calming atmosphere and can help with anxiety and stress reduction. It can aid in blood pressure stabilization and heart rate reduction, both of which promote relaxation.
- GREEN: Green is linked to harmony and the natural world. Because of its soothing and cooling properties, this hue has been employed to encourage well-being and healing in medical environments. Additionally, green is linked to rebirth and optimism, which might reassure recuperating patients. [19]
- Red: arousing and boosting hunger

- Yellow: improves focus and may be used to treat arthritis
- Green: a soothing hue that might encourage a healthy metabolism
- Blue: reduces hunger and alleviates migraine discomfort
- Indigo: allegedly fosters mental health
- Violet: beneficial for meditation and possible endocrine problems[20]



**Figure 3:** The effect of wall paints on places[20]

### **The significance of color in Hospital experiences and patient happiness**

Patients' experiences in hospitals are not just about the treatment they get; they also include the surroundings in which they are placed. One important factor that can significantly affect patient happiness and their entire hospital experience is color. Let's examine the significance of color in this context:

#### **Friendly surroundings**

Patients might feel more at ease and welcomed in a setting that is well-colored. Warm, soft colors like blues and greens evoke peace and tranquility while lowering tension and anxiety. This makes the rehabilitation environment more enjoyable, which raises patient satisfaction levels.

#### **Positive encouragement**

Vibrant, cheerful colors, such as yellows and oranges, can positively stimulate patients and improve their mood. This is especially important in pediatric areas, where the use of bright colors can help distract and entertain children during their hospital stay. A more positive experience in the hospital environment can contribute to greater patient satisfaction.[19]

#### **Colors and Emotions**

the color red. There was a uniform correlation between love and other feelings and colors in a

comprehensive cross-cultural survey including 30 countries and 22 languages.



**Figure 4:** The Importance of Color in Patient satisfaction and hospital Experience

Participants in the global research were asked to choose one feeling that correspond with each color. The survey's most frequently reported feelings are listed below: [20]

- For 68% of individuals, red is a sign of love.
- For 44% of people, orange connotes happiness.
- For 52% of people, yellow represents joy.
- 39% of people associate green with contentment.
- For 35% of people, blue indicates relief.
- For 35% of people, turquoise is a color of joy.
- For 25% of people, purple is a sign of joy.
- Half of the people think pink indicates love.
- 36% of people associate brown with dislike.
- For 51% of individuals, black is a color of despair.
- For 48% of individuals, gray denotes despair.
- 43% perceive white as a sign of relaxation.

Although the exact emotions might differ from person to person and from culture to culture, humans always associate color with emotion. It should come as no surprise that looking at colors would elicit sentiments because emotions and colors are intimately related. [20]

#### **Conflict of Interest**

The authors declared no competing interests in the publication of this article

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## سيكولوجية اللون في العلاج النفسي بمستشفيات التأهيل النفسي

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### المستخلص

يوجد هنا الكثير من الديناميكية في التفاعل بين اللون والبيئة التي نعيش فيها. فهو يؤثر على عواطفنا وسلوكياتنا بالإضافة إلى المساعدة في تعريف مناطقنا الخاصة. في عالم الطب، للون أهمية كبيرة بقدر ما يمتلك القدرة على التهدئة والشفاء. لمعرفة مدى تأثير اللون على مزاجنا بالضبط، تم استخدام استطلاع قصير ودراسة للأدبيات. حتى لو تم إجراء المزيد من الدراسات والدراسات السابقة، فقد تم تعزيز النتائج بشكل أكبر من خلال استخدام مسح جديد. الألوان الباردة، وفقا لدراسة سابقة، تساعد المرضى على الشعور بالراحة والطمأنينة في محيطهم. وفقا للخبراء والطلاب الذين استجابوا للاستطلاع، أثار اللون الأزرق والأخضر أفكار الاسترخاء والرضا والنظافة. تساهم هذه النتائج، من بين العديد من النتائج الأخرى، في تطوير بيئة طبية مثالية. يمكن أيضا استخدام هذه الدراسة لوضع خطة أساسية قوية للمكاتب الطبية الجديدة وإعادة تصميم المرافق الطبية الحالية في المستقبل.

**الكلمات المفتاحية:** علم نفس اللون، العلاج النفسي المبني على اللون، المصحات النفسية، اللون والعواطف