



The essence of color in workspace

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Abstract

The workplace environment serves as a key component in the modern era of productivity and employee well-being. Through an in-depth analysis of workspace design, this research uncovers how different colors are strategically integrated into various areas of the workplace, ranging from offices to meeting rooms and common spaces. Furthermore, this study probes into the relationship between color and employee well-being, delving into the effects of color on stress levels, mood, and overall satisfaction. In addition, the dissertation investigates the intricate connection between color and productivity. Color plays a significant role in influencing employee mood, productivity, and overall well-being. Strategic use of color can enhance employee performance and satisfaction. This study's findings support the majority of the ideas, psychological properties and effects of colors on the mood of individuals.

Keywords: Color psychology, workplace design, employee well-being, productivity enhancement, color harmony

Introduction

Numerous academic research conducted throughout the years have shown that color affects our moods and actions in all of its forms. Due to its beneficial impacts on workplace productivity, its efficacy in managing anger, and its practical applications in psychological treatment, color psychology and its connections are receiving more research attention. One can adjust color palettes to meet workstation activities and functions by having a basic grasp of colors and the feelings they evoke.

Since we spend a large percentage of our lives at work, office environment and design directly affect worker productivity and well-being. The choice and use of color in workplace design is an often-overlooked element that may affect creativity, mood, and focus. In this study, we will examine the principles of color psychology from a scientific standpoint, as well as how color might improve worker well-being and productivity in the workplace.

As far back as Sir Isaac Newton demonstrated the presence of every visible color of the range in an intercepted sunlight with a triangular crystal, people have been fascinated with the characteristics of color. In advanced society, many individuals around the globe invest a lot of energy in encased rooms and building, for example, offices. Along these lines making a workspace that can conceivably help

with inspiration, profitability and prosperity is more imperative than any other time in recent memory. ☒

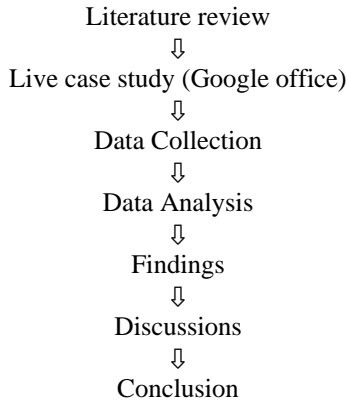
Color and Mood: The verbal confrontation with reference to whether color can influence our state of mind, productivity and psychological wellbeing has been contended all through history and proceeds in contemporary psychology. The inquiry with regards to the relationship between human conduct and color isn't a basic one. One of the main examinations to investigate the relationship amongst color and state of mind was in 1979 by Schauss in an investigation on American detainment facilities, it was discovered that by painting the dividers pink, forceful practices decreased.

Real world examples: It's imperative to look at how psychological hypotheses on color may have affected companies to execute color into the office to enhance efficiency and prosperity. For instance, it was discovered that purple had a negative effect in the workplace.

How to use color: In office design utilizing color in a multitude of ways, regardless of whether it's to isolate divisions or feature highlights color will upgrade a workspace.

The first person to thoroughly construct a theory of color based on a color wheel was Isaac Newton. Using a prism, Newton divided white light into a spectrum, which he then wrapped around itself to form the color wheel.

Materials and Methods



Literature Review

Effects of office interior color on worker’s mood & productivity, Dec 1987: The University of Texas at Austin. According to his research it is said that color affects employees mood & affects production when appropriate color is not used in the work space. He particularly focused on color preferences & conducted a survey where a group of people were sitting in one particular color room & another group in another particular room for some duration of time & asked to do work. The work is the same for every group. Ex- one group was sitting in a red wall color room, another group in a blue wall color room. Later a data was collected where the effects of color were calculated & how it affected productivity & mental well-being also.

This research was done only with red & blue color. According to the survey, there are more complaints of anxiousness in the setting of red office spaces. Employees in the red room had a higher mean anxiety level than those in the other groups, though. Employees who transferred to the different-colored office had a greater mean arousal score, while those who stayed in the blue room had a higher mean sadness score than the red color space group. These patterns imply that blue may be connected to tranquility, red to worry, and arousal may be caused by shifting surroundings. This piece of research mostly talks about how color plays a vital role in human’s lives. Colors at a time are both creator & destroyer like how the coin has two faces. Considering that most individuals spend their working hours in their workspaces, color selection is crucial. Hence, while choosing the color for office space, one should be careful & deeply understand the color psychology & how it affects the mood & productivity. (Kwallek *et al.*, 1988) [1].

Case study

Introduction

Google's office is located in Carina Tower in Bagmane Constellation Business Park in Bengaluru. The Google Bangalore office was first opened in 2004, and it has since grown to become one of the company's most important hubs

for innovation. Google has nearly 8 lakh sq ft built area & 6300 per floor sq ft at Bagmane Constellation Business Park. The office is home to over 8,000 employees and works on a wide range of products and services, including Search, Maps, YouTube, and Android.



Fig 1: Google's office is located in Carina Tower in Bagmane Constellation Business Park in Bengaluru

The Google office in Bengaluru is known for its innovative and sustainable design. A variety of energy-efficient elements, including solar panels and rainwater harvesting, are included in the LEED Gold-certified structure housing the office. A rooftop garden and a living wall are just two of the green elements in the business.

Site Details

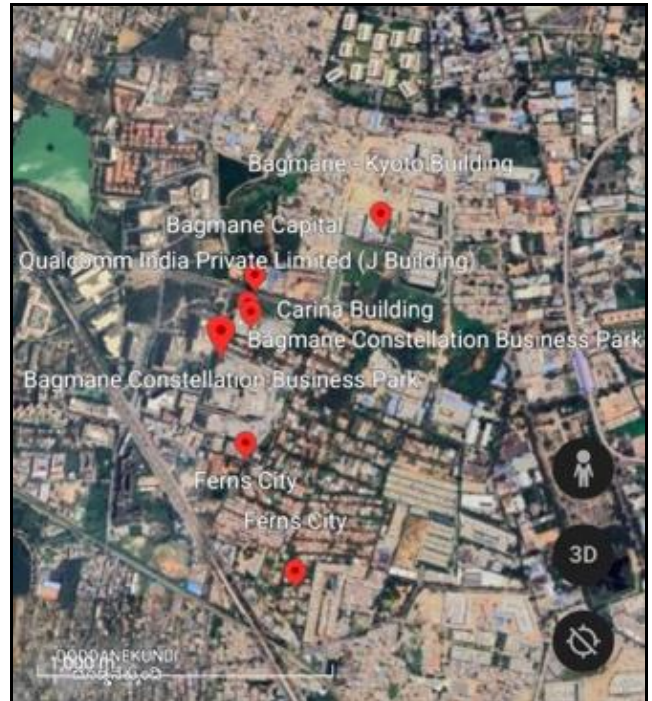


Fig 2: Mind Mapping

Satellite View of Google Office at Bagmane Constellation Business Park

Entrance Facing - North: Nearby Landmarks,
 Jeevika Hospital - 1.5 km
 Fern City- 1 km

Mind Mapping



Fig 3: Integration of colors in Google Bengaluru Office

Integration of colors in Google Bengaluru Office

Google's office in Bengaluru is known for its use of bold colors throughout the design. The color palette of Google's Bengaluru office is a carefully curated blend of vibrancy, cultural sensitivity, and functionality.

Vibrant Palette

Warm and Inviting: The color scheme of the Bengaluru office is characterized by a vibrant and warm palette. Colors like orange, yellow, and red are strategically used in communal areas to create an inviting atmosphere, fostering a sense of energy and creativity.



Fig 4: Vibrant Palette

Cultural Influences

Local Hues: Google embraces the rich cultural tapestry of Bengaluru through its color choices. The incorporation of traditional Indian colors, such as deep blues, greens, and reds, in the decor and design elements pays homage to the local context, creating a visually authentic and culturally resonant environment.

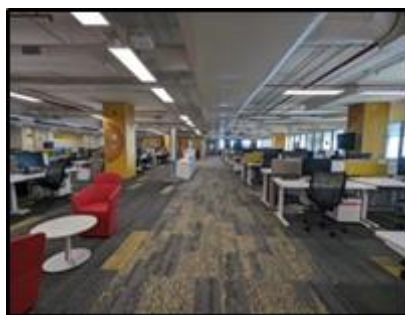


Fig 5: Zoning with Colors

Zoning with Colors

Functional Differentiation: Google employs color zoning to differentiate between functional areas. For instance, workspaces may feature neutral tones like whites and grays for a clean and focused atmosphere, while collaborative spaces may showcase a burst of energetic colors to stimulate creativity and teamwork.

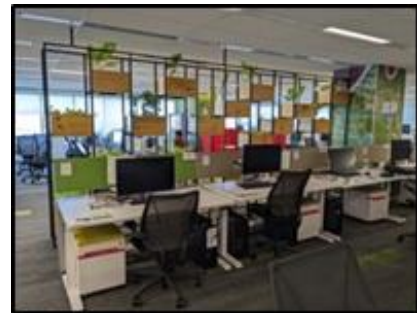


Fig 6: Nature-Inspired Elements

Nature-Inspired Elements

Greenery and Earth Tones: In alignment with biophilic design principles, Google's Bengaluru office integrates nature-inspired colors. Earthy tones and greens are often found in the form of indoor plants, accent walls, and furnishings, contributing to a calming and refreshing work environment.



Fig 7: Brand Consistency

Brand Consistency

Google Brand Colors: The iconic Google brand colors, including red, blue, yellow, and green, are subtly integrated into the office design.



Fig 8: Personalization Opportunities

Personalization Opportunities

Employee Customization: Google recognizes the importance of personalization in the work environment. Employees are often given the opportunity to personalize their workstations with colors of their choice, promoting a sense of ownership and comfort.



Fig 9: Lighting Considerations

Lighting Considerations

Natural Light Optimization: The office design prioritizes natural light, creating a connection with the outdoors. Large windows and open spaces enhance the distribution of natural light, influencing the perception of colors and positively impacting the mood and productivity of employees.



Fig 10: Balance and Harmony

Balance and Harmony

Balancing Energizing and Calming Colors: Google achieves a balance between energizing and calming colors. While communal areas may feature bold and stimulating colors, individual workspaces often incorporate softer hues to support concentration and focus.



Fig 11: Artistic Expression

Artistic Expression

Colorful Art Installations: The office may feature colorful art installations and murals, adding dynamic visual elements. These artistic expressions not only contribute to the overall aesthetic but also serve as sources of inspiration and creativity for employees.

Pillars: The pillars in the Google office have a variety of dimensions. The most common dimensions are:

- Height: 10' to 12'
- Rectangular Shape: 4'*4'

The pillars are painted in colors like yellow, blue, red and green. Some of the columns are even covered with geometric and floral patterns. The specific color or fabric used on each column depends on its location and function. Pillars in high-traffic areas, for example, are often painted white and neutral, reducing visibility. Where there is a lot of weight in areas such as the floor, the columns are often painted blue or green, to give them a more solid appearance.

Here are some of the benefits of using color in the workplace

- **Increased productivity:** Color can help to increase productivity by boosting morale and creativity.
- **Improved communication:** Color can help to improve communication by creating a more relaxed and informal atmosphere.
- **Reduced stress:** Color can help to reduce stress by creating a more positive and upbeat work environment.
- **Increased employee satisfaction:** Color can help to increase employee satisfaction by making the workplace more enjoyable and inviting.

Survey analysis and Result

Color Survey

This survey aims to delve into the essence of color in the workspace, exploring its influence on various aspects the work environment.

Purpose of the Survey

This survey's main goal is to get information about how color contributes to a supportive, exciting, and productive work environment.

Survey Scope

This survey is designed to gather perspectives from a diverse range of individuals, including: employees from various industries & employees from various professions.

Survey Structure

The survey is structured to collect quantitative and qualitative data on the following aspects of color in the workspace:

- **Color preferences and associations:** Participants were asked about their personal preferences for different colors in the workspace and the emotions or characteristics they associate with each color.
- **Impact of color on productivity and well-being:** Participants were asked to share their experiences with how different colors have affected their mood, focus, and overall productivity in the workplace.
- **Color usage in specific workspaces:** Participants were asked about the use of color in their current workspaces and whether they believe the color scheme effectively supports the work being done.
- **Recommendations for color usage in workspaces:** Participants were given the opportunity to provide suggestions for enhancing the use of color in workspaces to promote productivity, well-being, and overall satisfaction.

Survey Significance

The following survey was conducted with different different

people in an organization. The objective was to gauge the collective mindset of people regarding color. The response was collected from the technical & non-technical working environment people.

Below are the demographics

The highest respondents of this questionnaire fell in the age group of (25-34), as shown in the pie chart, which is 64.3%, then followed by the age group of (18-24) with 32.1%. The least though, fell in the age group of 35 and above with 3.6%. Both male and female respondents are equal with 50% each. Respondents fell in the technical category with 92.9% & least was in the non-technical category with 7.1%.

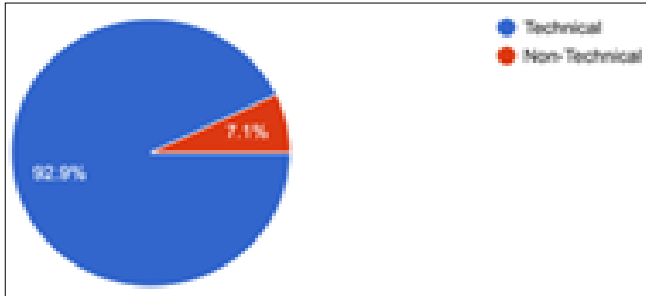


Fig 12: Please indicate your field of work

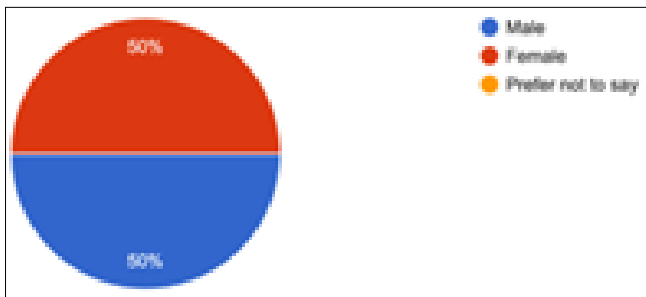


Fig 13: Please indicate your gender

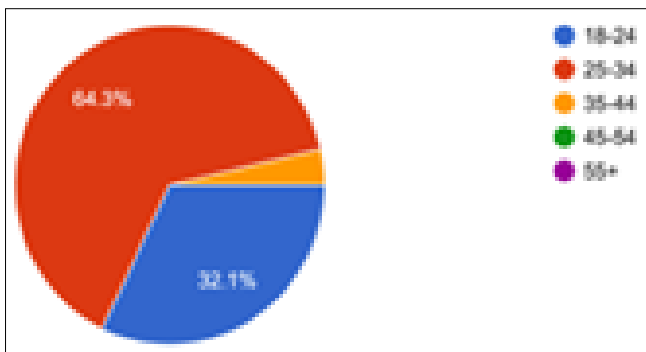


Fig 14: Please indicate your age group

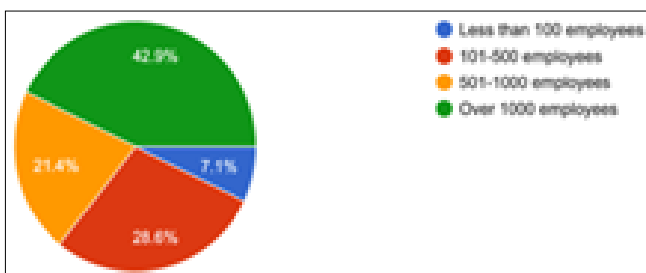


Fig 15: Please indicate company size

Survey Result

Following are the results obtained in the survey.

The survey indicated: Happiness is the Key to Success. By cultivating happiness, individuals can enhance their motivation, creativity, resilience, and relationships, ultimately setting the stage for success in various aspects of life. 89.3% respondents feel workspace affects mood, whereas 10.7% fall in the category of “may be”.

71.4% respondents feel workspace affects productivity & well-being whereas 25% falls in the category of “may be” and 3.6% falls in the category of no.

Most preferred colors for the workplace for creating a productive & positive work environment were: Green(32.1%) and Blue (35.7%) followed by red(14.3%) & other colors (14.3%).

Least preferred colors for the workplace for creating a productive & positive work environment were: Other (35.7%), Yellow (28.6%), Red (21.4%) followed by Blue (14.3%).

5% feels energetic & cheerful in bright colors whereas 10.7% does not followed by 14.3% maybe.

75% of respondents felt cheerful & energetic in bright colors as well 75% of respondents felt gloomier in dark space 82.1% liked the cool light.

The majority of respondents like the blue colour office space (32.1%) and green color (35.7%)

The majority of respondents does not like the white color office space (35.7%) and black & grey (28.6%)

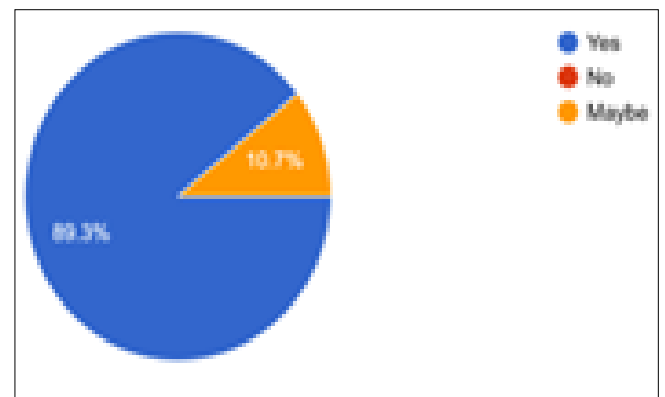


Fig 16: Do you feel that the color of your workspace affects your mood?

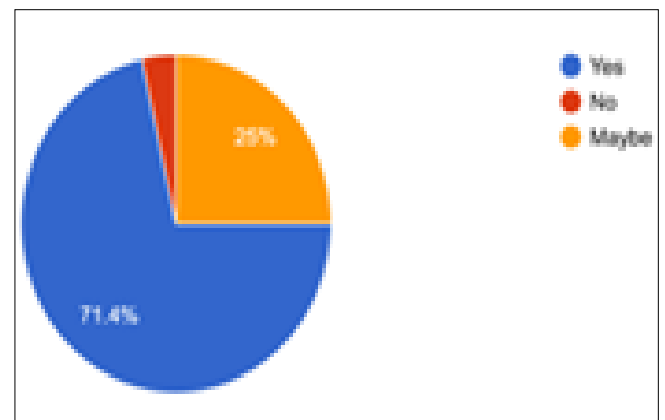


Fig 17: Do you feel that the color of your workspace affects your productivity and well-being?

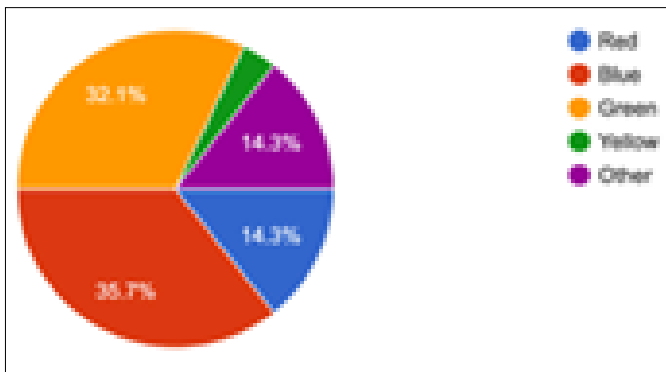


Fig 18: What specific colors do you find to be most effective in creating a positive and productive work environment?

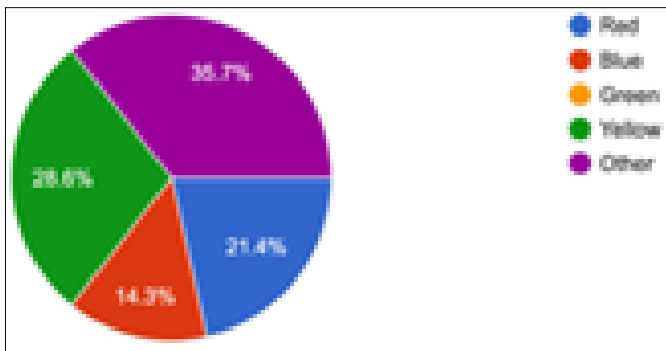


Fig 19: What specific colors do you find to be least effective in creating a positive and productive work environment?

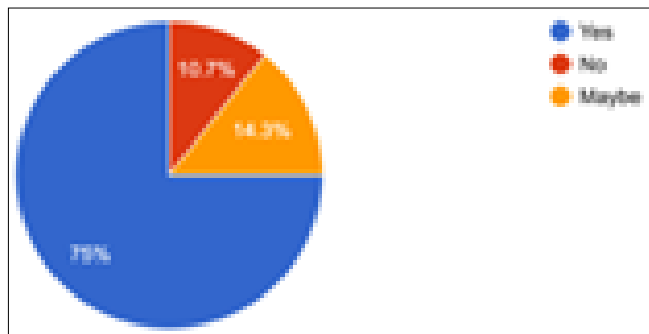


Fig 20: Do bright color make you feel more energetic and cheerful?

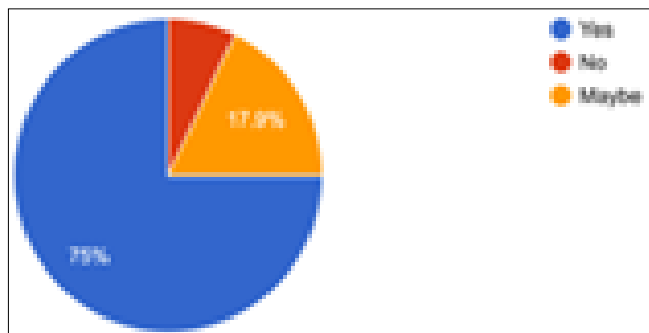


Fig 21: Do bright color make you feel more dull and sleepy?

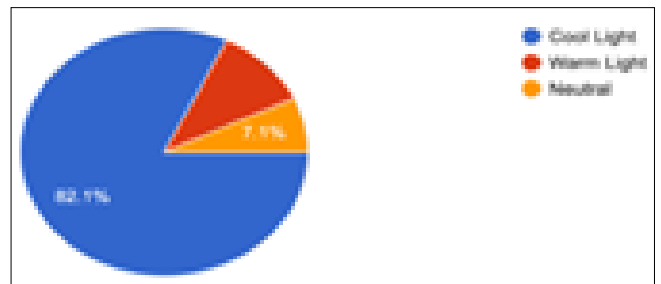


Fig 22: What type of light you prefer in work place?

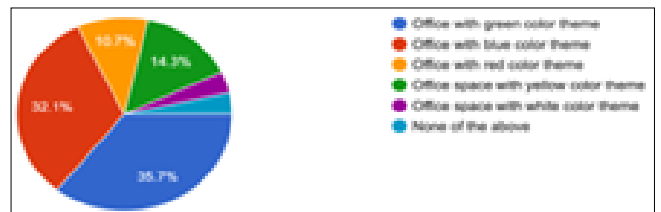


Fig 23: Please select from the following images the color scheme that you find to be most effective is creating a positive and productive work environment

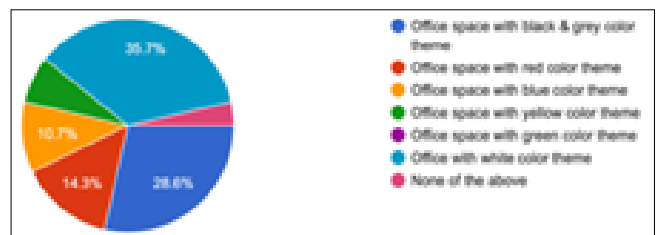


Fig 24: Please select from the following images the color scheme that you find to be least effective in creating a positive and productive work environment

Additional Questions Result

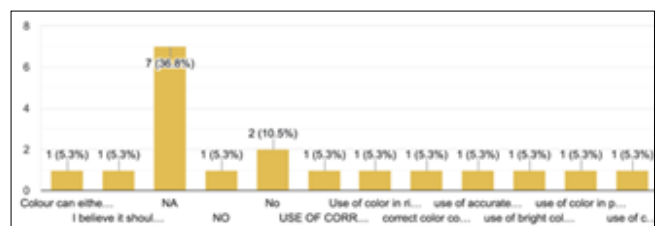


Fig 25: Do you have any other comments or suggestion about the use of color in the workspace?

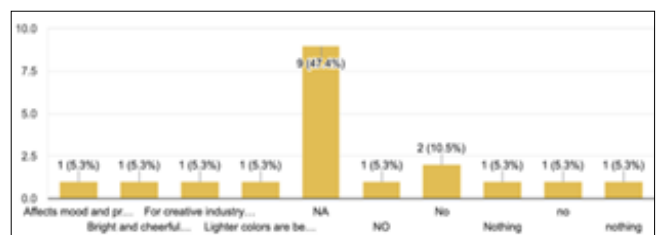


Fig 26: Please share any additional thoughts or insights you have on the relationship between color and work environment

Overall Response

Preferred colors which relaxed minds were: Blue, Green.

Distracting colors were: Yellow, Brown, Black colors.

Conclusion

The findings of this study provide credence to the majority of ideas on the psychological characteristics and affective states of colors on human mood.

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