

## “IMPACT OF COLORS ON YOUTH: A COMPARATIVE STUDY BETWEEN DESIGN AND NON-DESIGN BACKGROUND STUDENTS”

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### **ABSTRACT**

*Everybody sees color every day; it is the fundamental element of everything we perceive. When seen psychologically, colors are supposed to influence behaviour. Another useful tool for communication is color. It is well known that different colors have different significance in terms of religion and society. We encounter many colors every day. According to legend, each color has unique psychological characteristics.*

*This study has been conducted on college students to understand the impact of colors on their daily behaviour and to see that if color had any negative effects on it. A quantitative research has been designed and 200 college students were included in the survey's sample, out of which 184 responses have been recorded. A self-structured survey was made available online.*

**KEYWORDS:** *Influence Behaviour, Color, Fundamental Element of Everything We Perceive*

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### **Article History**

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### **INTRODUCTION**

Everywhere you look, there are hues to be seen: the sky is white with clouds, greenery is creeping up gray stone buildings and red brick buildings, and the ground is brown with soil. These hues evoke feelings as well as sight.

When selecting colors for their work, talented designers take into consideration the feelings that certain hues elicit in us. There's a reason why so many sustainable firms use green in their branding and so many fast food brands use red; red can make us feel hungry, while green, the color of thriving plants, makes us think of the environment. Understanding the art and science behind color meanings can help designers and businesspeople alike produce more impactful, memorable designs.

Numerous studies have found that the environment we live in and the colors that are all around us can affect our psychological behaviour. Chromotherapy is the use of color in the treatment of neurological or mental problems. Therefore, it is clear that colors may have a significant impact on a person's day-to-day activities.

Chromotherapy, or the use of colors to heal, was used by many prehistoric societies, including the Egyptians and the Chinese. Sometimes, chromotherapy is referred to as light therapy, Colorology or treatment. Additionally, it was shown that various hues elicited various psychological feelings (Cherry, no date). Marketers are utilizing color in novel ways in anything from alcoholic beverages to consumer electronics.

Despite this, little academic research has been conducted into the role of color in marketing (Labrecque and Milne, 2012). Even if one has a strong affinity for nature, it is increasingly vital to recognize that people spend the majority of their lives in enclosed structures. Understanding how spaces impact people is therefore essential for personal well-being (Kwallek, Lewis and Robbins, 1988). Colors have also found their way into cultural beliefs all throughout the world (Adams and Osgood, 1973). In almost every culture, black is associated with evil and death. With this association in mind, we were curious whether a hint as subtle as a person's clothing color may have a major impact on his or her conduct (Frank and Gilovich, 1988).

As a result, adopting the appropriate color in design is critical in such structures. Drawing cognitive maps and wayfinding in interiors is equally important. Environmental interventions that encourage route finding can be applied on two levels: floor plan typology design and environmental cues, which include signage, furnishings, lighting, and colors, among other things (Kurt and Osueke, 2014). In conclusion, different colors may alter students' affective states, which in turn affect their workload and degrade their performance (Kumar, Sterkenburg, and Diekfuss, no date). The primary goal of this research is to examine and analyze the impact of colors on the moods of college students from design and non design background.

### **AIM & OBJECTIVE**

- It aims to understand why and how different hues affect our feelings, behaviour and decision-making processes.
- How colors can influence emotional responses.
- To understand that Color preferences also exert an influence on the objects people choose to purchase, the clothes they wear, and the way they adorn their environments.
- To understand that certain colors can have an impact on performance.
- To understand the awareness and perception of youth towards colors.

### **Hypothesis**

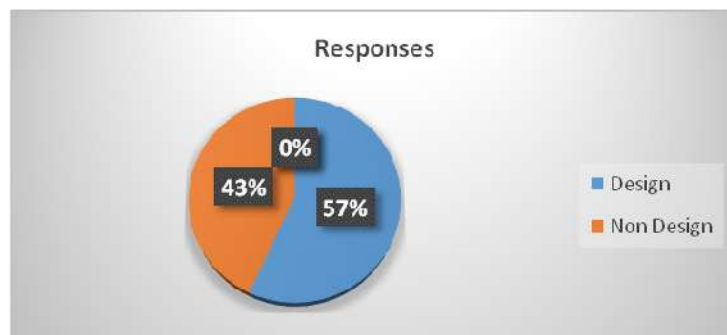
- **H1** –Youth from design background are more aware and emotionally expressive towards colors in comparison of others.
- **H1** – Perception towards colors is universal.
- **H1** – Effect on mood after wearing favourite color is universal.
- **H1** – Improvised daily activity after wearing favourite color is universal.

### **METHODOLOGY**

The effect of color on mood among college students was studied using a self-administered questionnaire. The survey was distributed using an online 'Google form' link among 200 students from design and non-design background. 183 college students from design and non-design background participated in the study. The goal of the study was thoroughly conveyed to the participants. The participants carefully reviewed the questions and marked the corresponding responses. The information was gathered and statistically analyzed. A pie chart was created to represent the results.

## RESULT AND DISCUSSION

The data of students from design and non-design background, was collected under three variables A) Awareness B) Perception C) Color& Emotion through google form and analysed statistically with the help of pie & bar charts.

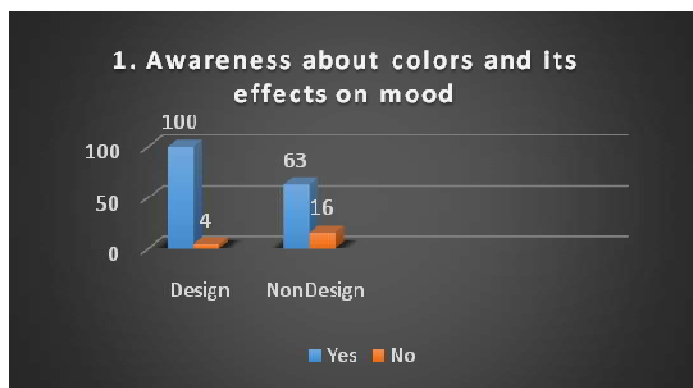


**Figure 1.**

The data was collected and analysed. Fig – 1 stats that out of 183 respondents 57% were from design background and 43% were from non-design background.

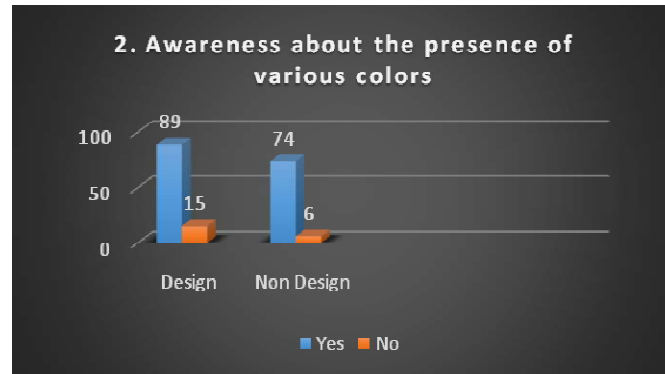
### A. AWARENESS

Data collection of the respondents from design as well as non design background has been done under the variable AWARENESS and its analysis in graphical presentation is as follows –



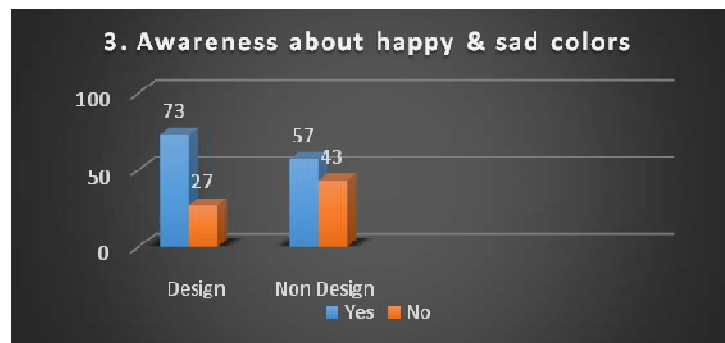
**Figure 2.**

The above chart depicts the percentage distribution of responses to awareness about color and its effect on mood. 96% (blue) respondents from the design background are aware and 4% (orange) respondents are not. Whereas 79% (blue) respondents from non-design background were aware and 21% (orange) respondents were not.



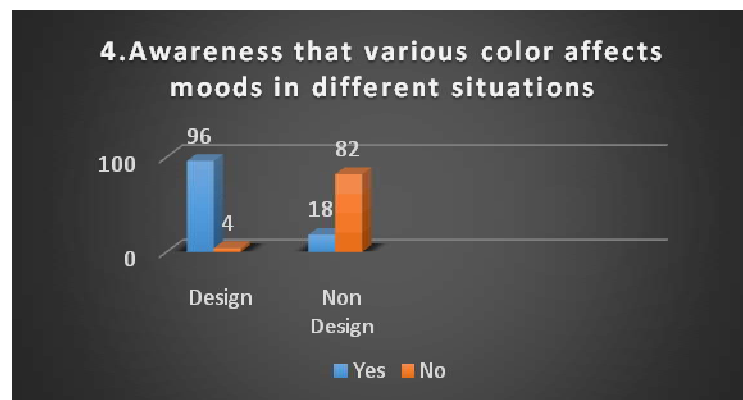
**Figure 3.**

The above chart shows that out of 183 respondents 89% (blue) from design background had the awareness about the presence of various colors and 15% (orange) were not aware, though 74% (blue) respondents from non-design background had the awareness about the presence of various colors and 6% (orange) were not aware.



**Figure 4.**

It is being observed from the above chart that 73% (blue) respondents from the design background had the awareness about happy and sad colors and 27% (orange) were not aware of it, whereas 57% (blue) respondents from non design background had the awareness regarding happy & sad colors whereas remaining 43%(orange) respondents doesn't have.



**Figure 5.**

The above chart depicts that 96% (blue) respondents from the design background and 18% (blue) respondents from the non design background had the awareness that various colors affect moods in different situations. Whereas 4%

(orange) respondents from the design background and 64% (orange) respondents from non design background were unaware of the same.

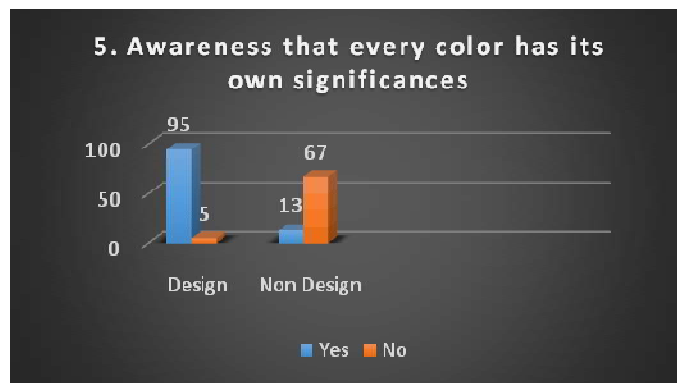


Figure 6.

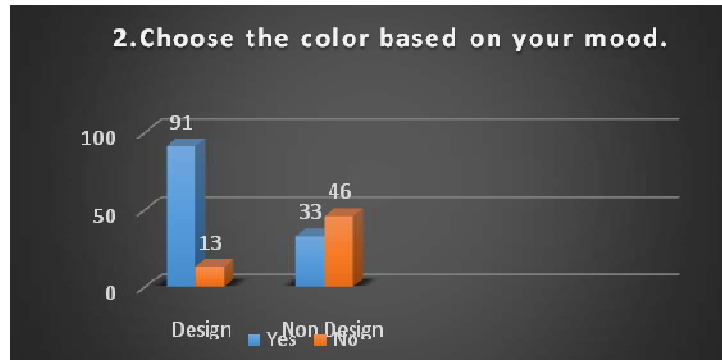
The above chart shows that 95% respondents from design background and 16% (blue) respondents from non design background had the knowledge that every color has its own significance, though only 5% respondents from design background and 84% (orange) respondents were not aware of it.

**B. PERCEPTION** - Data collection of the respondents from design as well as non design background has been done under the variable PERCEPTION and its analysis in graphical presentation is as follows –



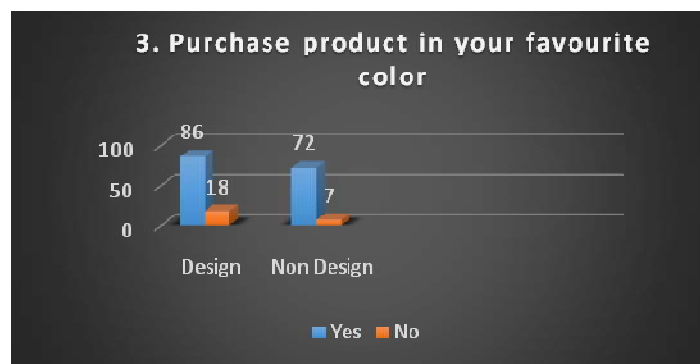
Figure 7

It is being observed from the above pie chart that **Black** color is favourite of maximum youth from Design (53%) & Non design (40%) background. **Blue** is the second rated favourite color by design (21%) & Non design (25%) background. **Purple** has been considered as favourite by 20% (Non design) & 8% (design) youth. Similarly **Grey** was considered as favourite color by 5% respondents from design and 1% respondents from non design background. **Green** was considered favourite by 9% respondents from design & 4% respondents from non design background. **White** color has been found favourite of 9% respondents from design & 4% respondents from non design background. **White** color has been found favourite of 6% respondents from design and 8% respondents from non design background. **Yellow** has been considered as favourite by 4% respondents from design & 1% from non design background.



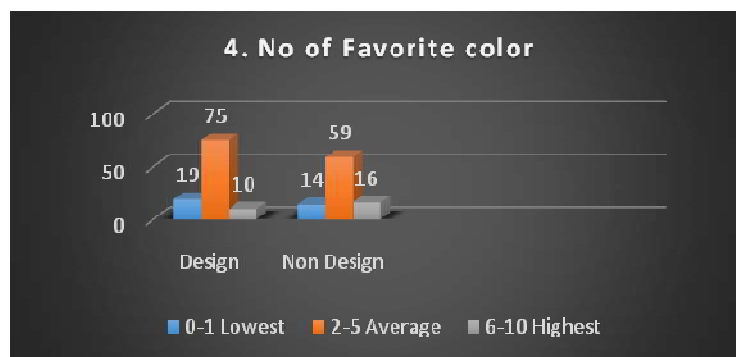
**Figure 8.**

The above chart depicts that 91% respondents from design background & 33% respondents from non design background choose the color based on their mood in comparison to 13% respondents from design & 46% respondents from non design background.



**Figure 9.**

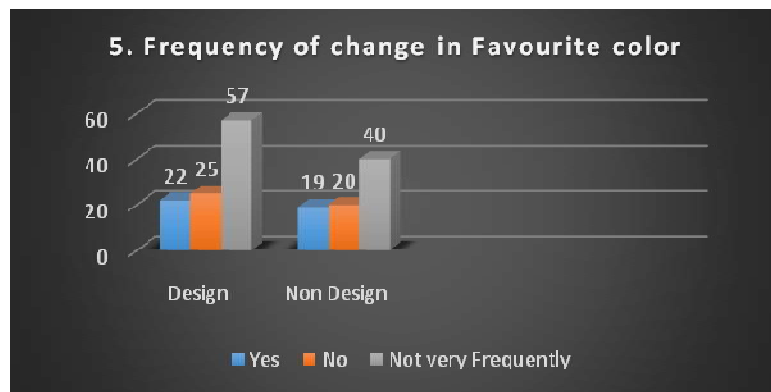
The result of above chart depicts that 86% from design & 72% respondents from non design background excepted that they like to purchase products in their favourite color. Though 18% respondents from design background & 7% respondents from non design background denied regarding the same.



**Figure 10.**

The above chart depicts that 19% respondents from design background and 14% respondents from non design background had lowest no. of favourite color, whereas 75% respondents from design and 59% of respondents from non

design background recorded average no. of favourite colors, though 10% respondents from design background found with highest no. of favourite colors.

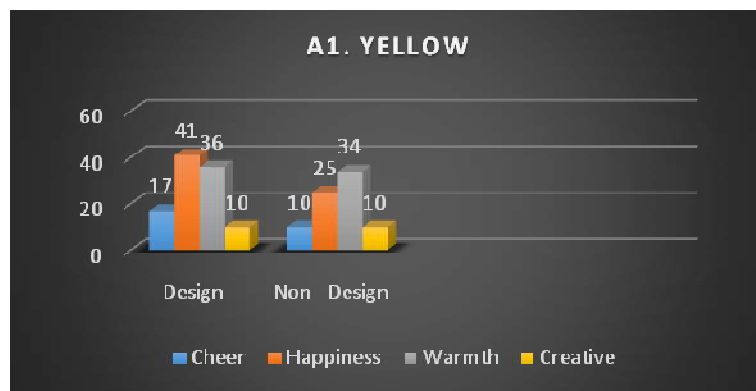


**Figure 11.**

It’s being depicted from the above chart that 22% respondents from design and 19% respondents from non-design background frequently change their favourite color whereas 25% respondents from design background and 20% respondents from non design background does not change their favourite color. Though 57% respondents from design background and 40% respondents from non – design background not very frequently changed their favourite color.

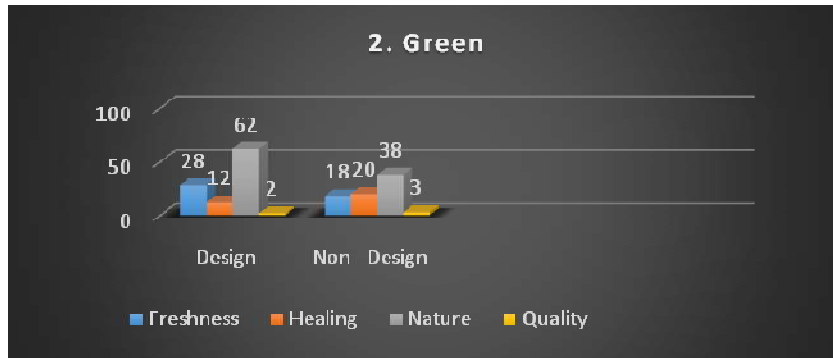
**C. COLOR & EMOTION**

The collected data of respondents from design as well as non-design background has been done under the variable COLOR & EMOTION with its analysis in graphical presentation is given below –



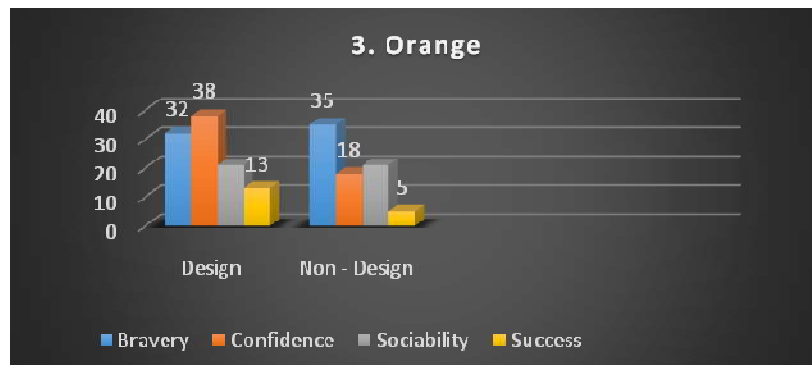
**Figure 12.**

The above chart depicts that 17% respondents from design and 10% respondents from non – design background connects yellow with cheer emotion, 41% respondents from design and 25% respondents from non – design background has connected yellow with happiness, though 36% respondents from design and 34% respondents from non – design background has considered yellow color as warmth, whereas rest 10% each respondents from design as well as non – design background had depicted it as creative emotion.



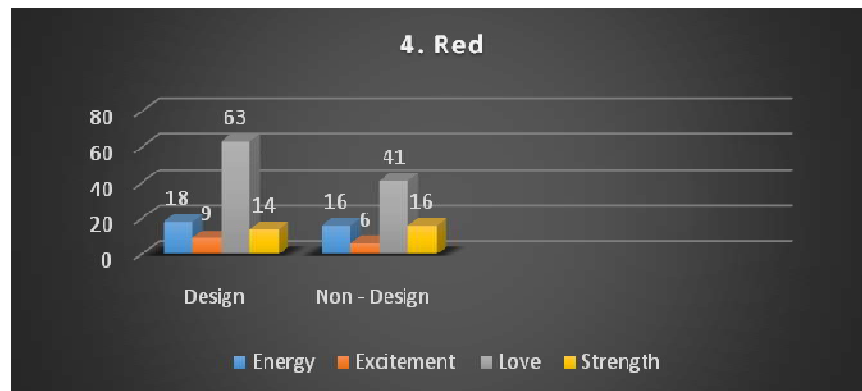
**Figure 13.**

The result of the above chart reveals that 62% respondents from design and 38% respondents from non – design background relate green color with nature, 28% respondents from design and 18% respondents from non – design background has related it with freshness, though 12% respondents from design and 20% respondents from non- design background connects it with healing, whereas 2% respondents from design and 3% respondents had related it with quality.



**Figure 14.**

The above chart depicts that the color orange has been related to confidence by 38% respondents of design and 18% respondents of non-design background, It was perceived as color of bravery by 32% respondents of design and 35% respondents of non – design background, though 21% respondents from each group related it to sociability, whereas 13% respondents from design and 5% respondents from non – design background related it to success.



**Figure 15.**



It is being depicted from the results of the above chart that the color red has been connected with the emotion Love by 63% respondents of design and 41% respondents of non – design background, 18% respondents of design and 16% respondents of non design background related it with energy, though 14% respondents from design and 16% respondents from non design background related it with strength, whereas 9% from design and 6% from non – design background related it to excitement.

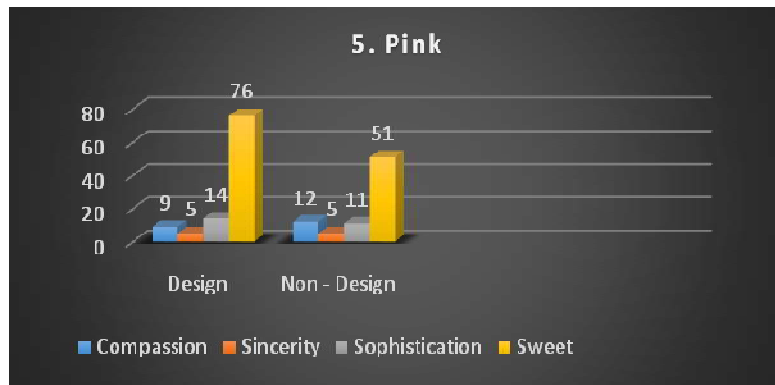


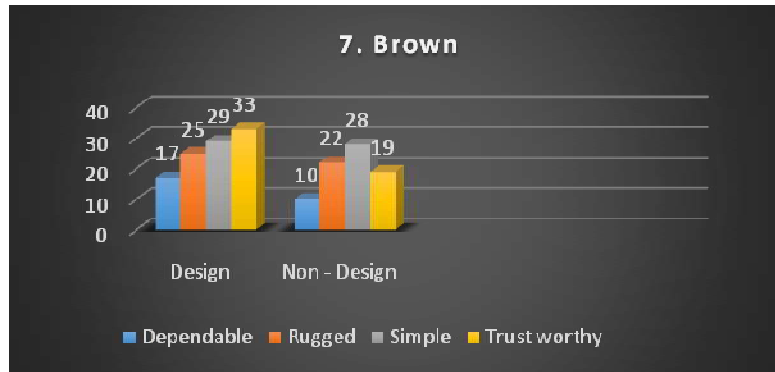
Figure 16.

The result of the above chart depicts that 76% youth from design and 51% from non – design background has related Pink color with Sweet emotion, 14% from design and 11% from non – design background has considered pink color as sophistication, though 9% from design and 12% from non – design background had related it to compassion, whereas rest 5% from both the groups had related it with sincerity.



Figure 17.

It is evident from the results of the above chart (Fig – 17) that 64% respondents from design and 36% respondents from non – design background had depicted purple color as Royalty, 26% from design and 28% from non – design background had related it to Luxury, though 12% from design and 9% from non – design related it with Ambition, whereas 2% from design and 6% from non – design background connected it with spirituality.



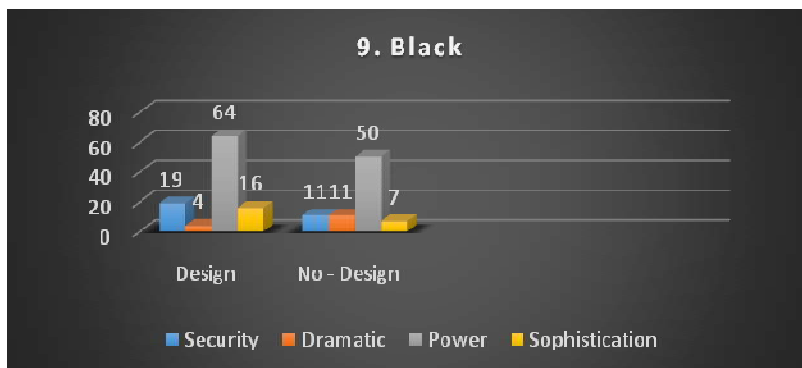
**Figure 18.**

It is being depicted from the results of the above chart (Fig – 18) that 33% youth from the design background and 19% youth from the non – design background relate brown color to Trust worthy emotion, 29% from design and 28% from non – design background connects it with simplicity, though 25% from design and 22% from non – design background had related it to Rugged, whereas 17% from design and 10% from non – design background had found it dependable.



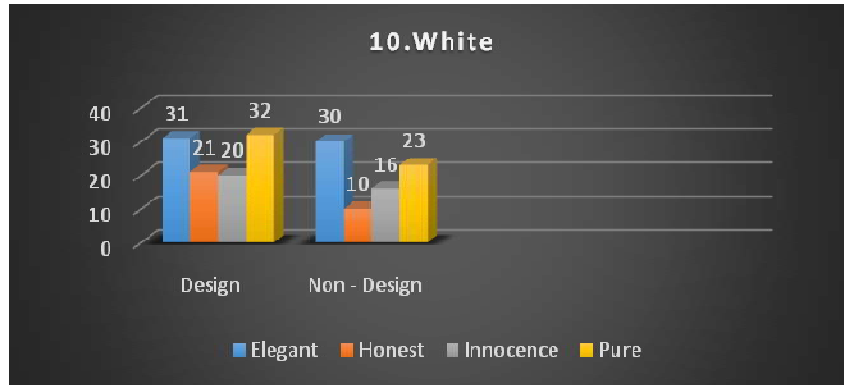
**Figure 19.**

It is evident from the results of the above chart (Fig – 19) that maximum respondents 59% from design and 40% from non – design background had considered blue color as emotion of peace, 26% from design and 17% from non – design background had related it to loyalty, though 12% from design and 18% from non – design had depicted it as trust, whereas 7%from design and 4% from non – design had related it to competence.



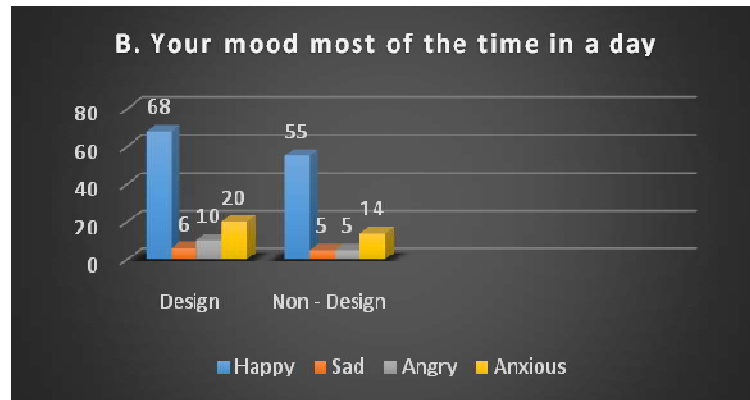
**Figure 20.**

The results from the above chart (Fig – 20) says that maximum youth 64% from design and 50% from non – design background related black color with power, 19% from design and 11% from non – design background considered black color as security, whereas 16%from design and 7% from non – design had depicted it as sophistication.



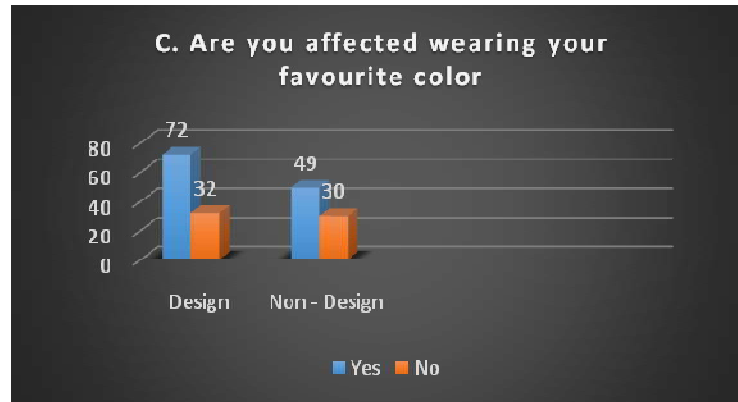
**Figure 21.**

It is evident from the results of the above chart (Fig – 21) that 31% respondents from design and 30% respondents from non – design background had depicted white as elegant, 21% from design and 10% from non – design background related it honesty, though 20% from design and 16% respondents from non – design background connected it with innocence, whereas 32% from design and 23% respondents from non – design background found it pure.



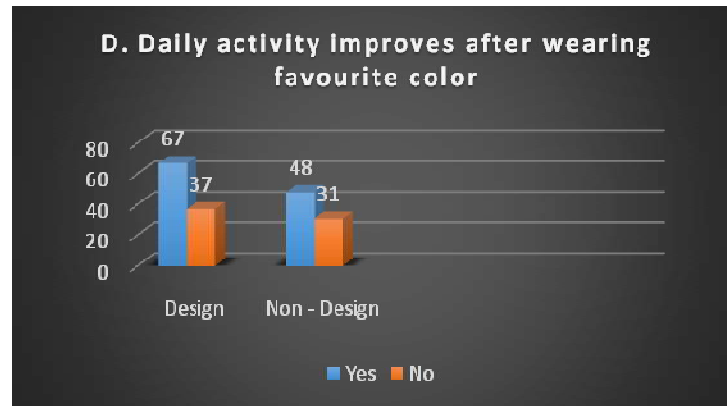
**Figure 22.**

The results of the above chart (Fig – 22) reveals that the maximum youth 68% from design and 55% from non – design background had happy mood most of the time in a day, 20%from design and 14% from non – design background has been noticed in anxious mood, though 10% respondents from design and 5% from non – design has been recorded having angry mood, whereas only 6% from design and 5% from non – design has been found with sad mood.



**Figure 23.**

The result of the above chart (Fig – 23) depicts that 72% respondents from design and 49% respondents from non – design background said that they get affected by wearing their favourite color, whereas 32% from design and 30% from non – design had registered their responses as not getting affected of the same.



**Figure 24.**

It is being depicted from the above chart ( Fig- 24) that 67% respondents from design and 48% respondents from non – design background feels that wearing favourite color helps in improving their daily activity, whereas 37% respondents from design and 31% respondents from non – design background doesn't feel the same.

## **SUGGESTIONS**

More research is needed to understand the mental and physical effects of color. Universal associations may exist, but many other factors, including personal preferences and individual experiences, also play an important role in your unique emotional and behavioral response.

Interest in the subject of color psychology is growing, but there remain several unanswered questions. How do color associations develop? How powerful is the influence of these associations on real-world behavior? Can color be used to increase worker productivity or workplace safety? What colors have an impact on consumer behavior? Do certain personality types prefer specific colors? As researchers continue to explore such questions, we may soon learn more about color's impact on human psychology.

## **CONCLUSION**

Color can play an important role in conveying information, creating certain moods, and even influencing the decisions people make. Color preferences also exert an influence on the objects people choose to purchase, the clothes they wear, and the way they adorn their environments.

People often select objects in colors that evoke certain moods or feelings, such as selecting a car color that seems sporty, futuristic, sleek, or trustworthy. As conclusion of the present study after the analysis of all the recorded data, it can be said that the color is powerful communicating tool of an individual’s mood or expression. Though it is being perceived visually but its influence affect an individual’s psychological and physiological reactions.

Present study proves that due to having an interaction with colors as a part of design curriculum with the psychological understanding, design students were found more aware and emotionally expressive towards color in comparison to others. Though Effect on mood after wearing favourite color is universal and daily activities has been found improvised universally after wearing favourite color.

So what's the bottom line? Experts have found that while color can have an influence on how we feel and act, these effects are subject to personal, cultural, and situational factors. More scientific research is needed to gain a better understanding of color psychology.

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