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BIO232: Ecology

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### **Lab Report: Colors of room and human behavior**

#### **Introduction**

Colors resonate in different ways with people. Everyone has colors that they are most attracted to, or that bring back memories from the past. People's moods may be influenced by colors. Generally, cool colors such as blue, purple, or green, induce tranquility and positivity, while warm colors such as red, orange, or yellow, are more related to moments of stress, anger, and awareness. Although the science behind colors and human responses to them is not completely certain, there is no doubt that colors transmit different emotions to people and may unconsciously make people react in one way or another to adversities. Colors play a great role in influencing our behavior. Some colors are associated with tranquility and quietness, and they may help to improve concentration and transmit clarity and calmness to people, while others are associated with danger, power, strength, or mental activation such as warm colors. College time is a period of happiness in life, one makes new friends, learns new things, and figures out what he or she wants to do in the future. However, it is also a time of immense stress, misbehavior, and craziness. Changes in mood are common during this time of life, one might feel happy and suddenly sad, and the slightest inconvenience means a big problem, and one becomes stressed and violent. The color environment can also influence these changes of mood, and as consequence, it may induce a tendency towards one behavior or another. The purpose of this experiment is to explore if a change in the color room when an unlike situation arises, will influence the human's reaction, and the way one assimilates and adversity.

## **Materials and Methods**

In this study, the only materials needed were a light projector that could change colors and could display a specific color in the walls of a room. Performing the change of colors this way will save money in painters and paint, and also in time. Groups of around 50 students per college were subjected to this study, therefore there was a total of 250 students. What this means is that 250 students resulted in a “denied access” web alert when they scanned their ID to go to the cafeteria. In College 1 the randomly selected color for the walls was light green, in College 2 were red, in College 3 orange, in College 4 (control group) it was no color, therefore the walls were white, and in College 5 the walls were light blue. The purpose was to find if the tonality of the colors supposed a tendency in the behavior of the students, therefore white, an achromatic color with no hue nor saturation was the control group.

## **Results**

The results recorded suggest that warm colors may induce an aggressive and self-defensive behavior, in comparison to cool colors, which may induce a more calm and peaceful behavior. Out of the 100 students recorded for red and orange walls (warm colors), 80% showed and self-defensive, nervous, and courageous behaviors when the registrar communicate to them that their access was denied. On the other hand, the other 100 students recorded for light blue and light green walls, 90% percent showed a calm, comprehensive behavior towards the same situation. The control group showed a mix of both responses.

## **Discussion**

Warm colors, such as red, orange, or yellow are considered to cause awareness, anger, strength, power, or love emotions to people, while cool colors such as blue, purple, or green are known to cause tranquility, peacefulness, or clarity to people. As the results data suggested, people responded more aggressively when warm colors were displayed than when cool colors were. The warm colors, which cause alert and anger, among other feelings, might have played an unconscious influence in humans' behavior in a situation where they were in "danger". As expected, when people were surrounded by these warm colors and they felt the pressure and a possible threat, they reacted negatively toward the situation, using a loud and rude tone were talking to the registrar. On the contrary when people were put in the same situation, but the environment transmits them unconsciousness peace, and tranquility, the students react with surprise, but they did not show signs of negative impulses.

Hue and saturation of colors, age, and gender are some of the limitations of these experiments. Age influence considerably the behavior of people, as the level of maturations varies. Gender could also play a role in these results as women tend to behave in a more peaceful and comprehensive way than men do. Another aspect to take into consideration is what other situations the students experimented with before the experiment. Some of them could have been really happy because their soccer team won, and others could be angry or said because they received a bad grade for an exam. These situations are information to take into account when considering this experiment.

## **Conclusion**

Colors resonate with people in different ways which is partly one of the reasons why different people have different favorite colors. The colors we surround are self with may have a positive, neutral, or negative effect on our daily actions and choices. Some colors are known to induce awareness, love, or power, while others induce clarity, peace, or focus. As suggested, warm colors had a negative effect on people when a possible situation of threat was presented. They might have felt more vulnerable and threatened when red or orange was displayed, rather than light green or light blue. Although there are some limitations, and a lack of clarity towards the results due to other variables such as gender, or age, it can be suggested that some colors, making a distinction between warm and cool colors, may induce a person to adopt a tendency towards one behavior or another.

## **References**

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