

Archival Study: How the Architecture of a Room can Influence a Person's Mood

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I conducted this meta-analysis of published studies examining how architectural designs can affect a person's mood, as it pertains to colors of and the overall arrangement of the room. There are many factors that influence one's mood; however, there is evidence showing that color can affect the way a person feels. Not only can color be a factor but the design of the room, whether it is a small confined space or a wide-open space, can have significant implications on a person's mood and creativity. Many interior designers and architects consider these factors when designing a room and or space. By trying to incorporate the psychological factors of people one could make a room more appealing. Numerous studies were conducted in which design, color, and lightening showed significant results in obtaining better grades, increased morale, and productivity. Using this information can therefore lead to designing more efficient buildings to increase the work potential of students and employees.

This meta-analysis of published studies was in relevance to examining how architectural designs can affect a person's mood, as it pertains to colors of and the overall arrangement of the room. There are many factors that influence one's mood; however, there is evidence showing that color can affect the way a person feels. Not only can color be a factor but the design of the room, whether it is a small confined space or a wide-open space, can have significant

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implications on a person's mood and creativity. Many interior designers and architects consider these factors when designing a room and or space. By trying to incorporate the psychological factors of people one could make a room more appealing. Restaurants are good examples of this, because they are designed to make a person feel welcome, calm, and even hungry. Therefore, why not use this information and apply it to corporate and or educational settings. This could be used to potentially increase the morale of the faculty and or staff as well as increase creativity and overall production from the workers and students.

A study was conducted by W. Bro and Victor Popow (2009) on psychology and architecture. This study involved examining artificial structures and their possible influences on human behavior. For this study it was believed that the human body responded to the design or structure of their environment biologically. Whether it is conscious or unconscious awareness, there was this predisposition that involved many factors influencing humans based on their environment. Complexity in the influences of colors and lights on the physical and behavioral effects on people was an issue in determining results. Other issues involved textures, acoustical characteristics; however, it was ultimately light that had the most influence. "Light is the most effective element in creating a sense of mystery and awe, and the manipulation of light is a principal agent in the creation of shrines and religious buildings" (Bro & Popow, 2009). According to results of the study, the wiring of the human brain and its reaction to the light and patterns of a room gives reason to believe that architecture causes behavioral effects.

In contrary to Popow's (2009) study combination of both design and color, there are studies that include the psychology of how color alone, influences behavior. A study by David Johnson (2008) found results that there are significant behavioral and physiological effects in how people respond to various colors. The color blue causes the body to produce calming

chemicals, however depending on the shade of blue it can cause symptoms of sadness and depression (Johnson, 2008). The color red can stimulate faster breathing as well as increase heart rate. Red can also stimulate hunger. The color yellow can enhance concentration and can actually speed up the metabolism. A designer and or architect could use this information to their advantage to produce environments that stimulate positive behavior (Johnson, 2008). Businesses and schools could also use this to their advantage by using these colors to possibly increase morale and productivity.

Architects have stated that the places that we inhabit can affect our thoughts, feelings, and emotions. This type of thinking is drawing the attention of behavioral scientists to find an empirical basis to this statement. Jennifer Kelley (2007), of Via Architecture provides examples of these other factors of the design that can influence these types of effects. Kelley (2007) found that when a person is working in a space with a ten foot ceiling, can show signs of thinking more freely and abstractly. This is due to the possibility of a person processing more abstract connections between objects in the room. It was also found that a person, who works in a space with an eight foot ceiling, will most likely focus on specifics (Kelley, 2007). Although, a spacious room induces abstract thinking, there are situations in which a tight space is necessary. A surgeon, for example, would be more effective in a smaller room size where he or she can focus on the finite specifics (Kelley, 2007).

The hypothesis is that the overall design of a room, including its arrangement and use of color can show significant effects in a person's morale and effectiveness in the work place. Therefore, by examining these articles, it can be determined that using colors and elaborate designs can increase productivity in many different schools and businesses.

Method

Participants

For this study I will be conducting a meta-analysis of published studies examining the effects of how an architectural design of a room as well as the color and overall arrangement of the room can affect a person's mood. Therefore, no participants will be used in this study.

Materials/Procedure

Due to the nature of this study, various online databases of published studies from Lindenwood University were examined. I used this online database to examine scholarly articles and or journals that are relevant to the study that involves how architecture and color can affect a person's mood. By having such a wide variety of studies and articles to examine I can find more evidence to support the fact that these factors do have significant effects in a person's mood. Therefore, the majority of my materials included a computer that has access to the internet, library references and periodicals, pen and paper for any potential side notes as well as a suitable area that gives me the ability to examine my articles in quiet.

Results

To elaborate further on the effects of architectural design and color on a person's morale, one must learn how to use different colors and arrangements effectively in order to stimulate a person's mood. As it pertains to colors, the most effective use depends on the room setting. Colors are effectively placed in kitchens, offices, and classrooms to stimulate a variety of emotions and feelings. My hypothesis is that the color and overall arrangement of a room will show significant effects in stimulating a response from people. By implementing these different colors and designs an architect and or designer could use it to increase productivity and morale in a business and or education setting.

The most effective method used in designing a room can involve the arrangement of the objects and the colors used. According to Kelley (2007), a person is inclined to think more abstractly in a more spacious area as opposed to a person who may focus on specifics in a smaller room setting. Therefore, when it pertains to space a larger room would be most effective in the classroom so that students can potentially engage in more elaborate thinking processes. A smaller space would be most effective in an operating room where one must focus on specifics. And a combination of the two could be used effectively in business offices to stimulate both types of thinking during the various planning stages. Other findings by Kelley included the fact that having rooms with adequate sunlight can improve students' grades. Lighting has also been linked to a having less of cognitive decline in retirement homes. The colors that are most effectively used in these settings are lighter shades of blue, yellow, and green. Using a combination of these colors can create more elaborate ideas, calm behavior, optimism, relaxation, ultimately increase productivity by increasing morale.

Discussion

The hypothesis was that there will be significant differences in morale depending on the arrangement and color of the room. This idea developed from the various findings of how design influenced a person. Although, I did believe that design could have significant effects on the body, it was the impact of colors and lighting that was surprising. With adequate lighting and an assortment of colors can create major impacts in not only morale but is linked to productivity, better grades, and inhibits a decline in cognitive ability in seniors (Kelley, 2010). Therefore one could use this information and design business offices and schools that can cause employees/students to reach their full cognitive potential. However, to improve this experiment I would have liked to examine more studies that were relevant to this idea. I would also like to

design my own experiment in the future to observe these results first hand and apply it to future work in the field of architecture.

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