Understanding the Psychological Effects of Colors in Interior Spaces: Case study of major eateries in Akure, Nigeria

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Abstract
The consistent use of same colors within the warm hues of yellow, red, and orange in eateries is of concern to this study and was so investigated for monotony as this has become a common practice even in big brands like McDonalds and KFC. What is the relationship between colors, appetite and eateries? Designing with colors in mind from the outset can be challenging especially in eatery designs, since color perception and psychology can mean different things to different people of different ages, gender and cultures. The aim of the study is to assess colors of interior spaces of eateries in Akure, with a view towards improving interior architecture of eateries, and the methodology involved using case studies of three major existing eateries in the study area. Pictures of the interiors of these eateries were taken using digital photography, and these pictures were compared with each other for similarity and monotony. A survey was also carried out using a questionnaire, so as to find out the perceptions of users/customers on the colors used in the eateries. The study found that red was explicitly used in the interiors of all eateries selected, and was complemented with neutral colors of cream and white shades. While it appears like color is synonymous to eateries, findings from this study reveal that a slightly different use of traditional/conventional eatery colors of red, yellow and orange schemes were used in different and unique ways, but respondents preferred unconventional eatery colors in the study area for maximum emotional effects.

Keywords: color schemes, consumer behavior, eateries, interior architecture, perceptions, psychology of color

1. INTRODUCTION

People are always amidst colors in daily encounters, and this defines people's behavior, style, and culture all around the globe. Color is one of the elements of design and can be used to define, accent, and solve issues concerning space in architecture. It is also very needful in interior architecture as it projects and pronounces forms within interiors; especially in ceilings, walls, floors and accessories used as decorations. Adams and Osgood (1973); Hupka, Zaleski, Otto, and Tarabrina (1997); and Hynes (2009) posit that the meanings of colors can be learned, although this can change over time. Color is a very critical factor when it comes to restaurant or eatery designs, because it is strongly associated with the sense of sight and customers' appetite. The impact of color choices and usage in interiors of eateries can be an overwhelming experience on customers; from condiments in foods, to accessories on walls, to furniture designs in dinning sections, the total experience can be dazzling. According to Singh (2006) "marketers are aware that an average customer's decision to purchase a product is 60% based on the product's color". Eatery designs should effectively utilize color schemes in such a way as to create an image which has a lasting effect on customers longing to return for another experience. Little wonder, Chefs and designers have created ways of stimulating appetites and dress sense through appropriate use of colors (Omale, 2013a).

According to Lohrey (2017) "color adds another layer of sensory stimulation and has a psychological association with the sense of smell as well as with appetite". The International Association of Color Consultants posits that "We eat with our eyes", this establishes the fact that there is a correlation between food and the human sense of sight. Having this idea in mind, restaurant or eatery designers have a creative challenge when such opportunities to design an eatery come up. Gyaan (2018), had emphasized that it is not only aesthetics that should be considered when choosing colors for creating ambience in restaurants but also the effects of these on customers' perception of the total experience, ranging from customers reactions on the food served and the tendency of staying more and spending more. Gyaan posits that different colors stimulate different emotions and can profoundly impact feelings of hunger, thirst and even space in customers. Obviously colors don't only affect the overall beauty of a product but also influence consumer emotions and behavior (Nezhad and Kavehnezhad, 2013). Restaurants

interior designs have consequential impacts on customers comfort and the total experience within the restaurants, but the perception of color choices as well as the responses of consumers for different products has become a very complex issue to eatery designers. The aim of the study is to assess colors of interior spaces of eateries in Akure, Nigeria with a view towards understanding the correlation between color, appetite and eateries.

2 LITERATURE REVIEW

2.1 Color Perceptions in Interiors of Eateries

Sable and Akcay (2010) affirm that "colors have the power to affect customer's overall perception of a product and this will affect purchase decisions". The importance of color in the environment cannot be overemphasized, as applying color to buildings have effects on not just the visual character of the environment but also on the people. It affects the way people feel and react to things around them (Omale 2013b). Morton (2004) emphasized that "color can sway thinking, change actions, and cause reactions. It can also irritate or soothe the eyes, raise blood pressure and can suppress appetite". Colors have the abilities and tendencies to influence moods and impact how people perceive a space – whether these spaces are interiors or exteriors. For example, color theorists have observed that color schemes or color choices associated with cool colors have the tendencies to recede thereby making a space appear larger, less formal and less intimate, compared to the use or application of warm and dark hues, which makes a space tend to appear closer, smaller with the tendency of privacy and intimacy (Russel, 2006, Fardi, 2016, Lohrey, 2017 and Gyaan, 2018). Similarly, Gyaan (2018) reiterates that "using warmer tones at the entrance of a restaurant makes the customers feel that the temperature is a couple of degrees higher than usual. Cooler shades send a psychological impulse that makes people think that the temperature is more relaxed". Lohrey 2017 advises that "bold, primary colors such as red, yellow and green, along with bright lighting, are especially appropriate for a casual dining restaurant or fast food establishment as they encourage quick turnover".

Color can also be used to draw attention, attract customers and create a purchase intention as well as a desired atmosphere (Kerfoot, Davies and Ward, 2003). Color intensity is also a very important factor to consider when choosing colors for an eatery interior. Intensity refers to the

level of saturation a particular color portrays especially when it is mixed to brighten or reduce its original nature. For example, warm hues of yellow and orange have been proven to be good for interiors of eateries because of the abilities to create an ambience of exuberance and cheerfulness related to attractiveness. Inadvertently, cool colors of blue and green hues should be applied with caution and played down in little quantities so as not to create a disturbing effect from color castings from other colors.

Cherry (2013) posits that while perceptions of colors are somewhat subjective, there are some color effects that have universal meanings. Colors can be used to create dynamism in restaurant designs depending on the type of restaurant, whether it's a fast food joint or a family restaurant. Lohrey (2017) advices that "bold, primary colors such as red, yellow and green, along with bright lighting, are especially appropriate for a casual dining restaurant or fast food establishment as they encourage quick turnover. Muted, subtle colors that are neither too bright nor too light create a restful, leisurely family atmosphere that can keep customers chatting over their post-dining coffee longer. Incorporating red, black and gold into a restaurant design helps to establish an upscale, stylish image". Lohrey emphasize however that "white isn't always the best choice to include in a restaurant design. Not only does white tend to neutralize food colors, it also can contribute to glare". However, attracting customers to eateries to patronize and stay for long hours has advantages and disadvantages and the disadvantages portend challenges to designers, because when customers stay for long, this can create more sales but can also create shortage in available seats for more customers to come in for more patronage - this remains a challenge for restaurant designers.

Color may also be used to create active and comfortable vision in interior spaces, where colors help the surfaces surrounding the space, like walls, roofs, and floors, to be more visible (Faulkner 1972). When colors are used on buildings, this affects the way people perceive such buildings, and this perception could be positive by inspiring people or negative by dropping the moods of people (Omale 2013b). Colors seldom stand alone, and they affect and are affected by the colors around them. Murphy (2003) noted that any type of color combination used within an environment can affect the way people in that environment think, feel or act. Murphy appears to corroborate Omale (2013b) on perception of colors on the environment.

How designers treat walls, floors and ceilings have effects on customers' perception on the food that is to be eaten and tabletops, dish wares as well as the accessories in restaurants are capable of creating different effects as well as perceptions on different costumers.

2.2 Effects of Color Choices on Restaurant Users

2.2.1 Red, Yellow and Orange

The design and colors used in the logos of most companies and commercial outlets are very important as they are visibly seen or reflected on the buildings, the staff uniforms as well as accessories found within and around such commercial outfits. Nezhad and Kavehnezhad (2013) found that "knowledge and awareness of consumers' color choices enables marketers to identify and offer the right and suitable products color". It appears most restaurants have red and yellow colors on their logos as well as the buildings interiors and exteriors as well. They are both associated with attracting the eye and drawing attention (Nezhad and Kavehnezhad, 2013). A lot of food items naturally exist in these colors; such as tomatoes, peppers, curry, carrots etc. No wonder the association with fast foods and other types of restaurants. Fardi (2016), claims that yellow causes uneasiness and can be used on interior walls of restaurants if owners want quick turnaround for customers to eat and leave. Yellow and red are mostly seen in restaurants and most eateries because of the association with appetite (Nielson 1990), and red colors are associated with elevated heartbeat and blood pressure (Hemphill 1996) - the most reason red colors should be downplayed in hospital designs, especially cardiovascular hospitals). They are also associated with excitement and emotions that tend to make customers want to eat and take their exits almost immediately (Gyann 2018). McDonalds and KFC are two very big fast food brands that use red and yellow on their logos, walls and even staff uniforms, mugs and accessories as these two colors have impacts on customers – a means of recognizing brands (Hynes 2009). A mix of red and yellow produces orange color. Orange is very good for restaurant business as it encourages impulse, stimulates the human senses, and is a very comforting color for many (Fardi 2016). Fardi claims that it is capable of stimulating appetite and it encourages conversation, which will in time cause customers to spend more time thereby spending more money.

2.2.2 Green, Blue and Purple

Color green is associated with nature, growth and development, health and wealth, and causes a relaxing atmosphere especially in interiors. This creates a relaxing mood in customers and encourages them to stay a little longer thereby eating more and spending more. Most food items begin as green plants before they automatically assume their natural color when they bud and become food. However, a lot of food items assume natural green color especially cruciferous vegetables, such as spinach, lettuce, cabbage and broccoli. However, application of green color to walls, floors and accessories should be carefully done because when it combines with some light sources, this can create a gloomy and depressing mood on customers. However, (Fardi, 2016) advises that instead of using inappropriate green colors on walls and floors and accessories, it is better to have green plants in pots dotted around within the eatery space.

Blue, just like green, falls within cool colors and is associated with relaxation and can create a soothing effect. Though most food items rarely naturally occur in blue color and purple, in restaurant interiors blue has the limitation of reducing customers' appetite (Gyaan 2018). Gyaan further stresses that while purple may not be a very good color for restaurants, it can be very good for coffee shops, although caution is needed during application and should have a contrast using red color, since red encourages impulsive buying.

2.2.3 White, Beige and Grey shades

Color theorists have established that painting interior walls with any of white, beige, grey or other light or neutral shades is capable of making a space appear bigger than it originally is, especially if such space is small. Light or neutral colors are not only capable of making a space appear larger, but can also create a relaxing feeling among inhabitants (Gyaan 2018). Gyaan however advices restaurant owners to be careful in color choices and application within interior walls especially if the eatery space is small, as painting the walls with light/neutral shades are capable of making customers feel relaxed thereby staying longer, hence preventing other customers from having seats as well as losing patronage for the owners. Gyaan (2018) further stressed that "restaurants that have a high volume of customers every day should avoid applying

light colors, as with high volume customers, staying time in the restaurant should be as minimum as possible"

Light neutral colors are however excellent ideas for ceilings and circulation areas as they throw in more light from windows and artificial light sources thereby making those areas appear larger and brighter thereby enhancing visibility also. Gyaan however advises that using other contrasting colors against light neutral colors on walls can have adverse suppressing effects on customers, and so should be used with care.

2.3 Color Complexities and Human Emotions

Color choices can be a difficult task when taking decisions in designs that involve different products and different people on the basis of age, gender, ethnicity and cultural connotations, thereby making it a complex task for designers. For example, in gender studies on colors, Khouw (2002) uncovered that "men were more tolerant of gray, white and black than women, and women reacted positively to the combinations of red and blue more frequently". However, Hemphill (1996) found that bright shades of (white, pink, red and blue) brought out more positive reactions of happiness, and excitement on people generally, but darker colors of brown and black shades created the opposite effects. Findings from Labrecque and George (2011) showed that when brands use warm colors such as red and orange, there is excitement compared to cooler colors like blue. In a related study on colors in hospital environments, (Dijkstra, Marcel, and Pruyn, 2008) showed that blue walls created less stressful feelings on patients; and orange walls were stimulating compared to white walls.

In cultural studies that involved colors, (Wiegersma and Van, 1988) showed that blue color was the most preferred color generally across cultures. While the most favorite and most sacred color of the Hindu religion in India is orange color, it appears that orange color remains unknown in Ndembo cultures in Angola and Zambia in Africa. Similarly, Grossman and Wisenblit (1999) found that in East Asian countries of Japan and China, gray color is used for cheap goods; ironically, gray color remains a dominant color of high quality goods in the United States. According to Coote (1992) the cattle keeping and rearing tribe of Nilotes in south Sudan do not make art objects and they do not have traditions of visual art, yet their appreciation of perceptual

values can be compared with those of other people who do have aesthetic cultures. The Nilotes perceive, appreciate, and enjoy aesthetics in their environment through their appreciation of coloured beasts in their herd of mostly off-white, grayish cattle. The complexities associated with colors and different human perceptions from all around the world are far more experienced than stated and such studies can be a herculean task, however designers should accept this as a challenge and work around it, as this is part of what design is about. However, Craven (2013) asserts that picking wrong colors for a building will make it appear flat and featureless, and if the colors are too bold, they might overwhelm the architecture and upset neighbors.

3. METHODOLOGY

3.1 Design

The study employed case study approach to analyze the interiors of three cases of eateries within Akure metropolis. It also used a survey to get inferences of customer's perception and preferences as participants for the study. A well structured questionnaire was used to achieve this purpose. The study's population was basically customers found in the selected eateries in Akure, this is where the sample size was drawn. Three common and popular eateries were carefully selected as case-studies and the three buildings are of contemporary architectural styles and the constructions were completed within the last fifteen years. The three eateries involved in the study are Chicken republic, Tantalizers, and Mr. Biggs (all in Akure) and they were chosen because of their accessibility to the public and proximity to users and customers as well.

Five popular eateries were initially selected for the study, but were later reduced to three and this was because two out of the five were not purpose built as eateries, but were constructed with other uses in mind like bakeries. The other two buildings that were removed from the study were DKFC and Captain Cook buildings. Observation method was used to decipher the connections on the colors of the pictures of the interiors, while case studies were adopted as the qualitative approach of research inquiry. 100 participants were adopted as respondents for the study, comprising 56 males and 44 females. They were selected using systematic random sampling method where one in three costumers was selected for the study, and visit time at the eateries by the researchers was between 3pm and 6pm on Mondays, Wednesdays and Fridays. In order to stimulate visual interests, the photographic data captured as much as possible the colors

and material rendition of walls, floors, ceilings and internal arrangements of furniture, so as to have a basis for comparing the interiors of the case studies selected. The method was based on keen observation of photographic contents of the visual data obtained from the field. According to Groat (1988), Nasar, (1998), and Stamps, (2000), there exists a strong positive correlation between preferences of 2Dimentional pictures of photographic contents compared to preferences of actual onsite objects and sceneries. 100 Participants were approached in a particular order by selecting every third entrant, which showed a systematic random style of approach. However, participants were 18 years old and above, and only those who showed interest in the survey were administered questionnaires. The survey was done within two months, between February and March 2019, and three working days within each week were selected for questionnaire administration. The greatest limitation for the study was the fact that most customers that had already settled to eat and were approached for questioning, turned down the offer to participate in the survey.

3.2 Study Area

Akure is a traditional Nigeria city and like other traditional Yoruba towns in the country, it existed long before the advent of British colonial rule. The city is located within Ondo State in the South Western part of Nigeria. It lies approximately on latitude 70. 2 North of the Equator and longitude 50. 2 East of the Greenwich Meridian. Akure is a medium-sized urban centre and became the provincial headquarter of Ondo province in 1939. It also became the capital city of Ondo State and a Local Government headquarters in 1976. Akure is located approximately 700km South West of Abuja, the Federal Capital of Nigeria. The population of the city grew from 144,544 in 1987 to 148,880 in 1988 and 153,347 in 1989 to 157,947 in 1990 (Ondo State of Nigeria, 1990). The 1991 national population census however, put the population of Akure at 239,124 and its estimated population in 2006 was 353,211 (NPC, 2006). At present the city is estimated to have over 387,087 people. As at 2015, the population of Akure was 556,300 constituting 0.305% of Nigeria's population based on a growth rate of +4.64% annually used between 2006 and 2015 (Omale, 2013b). Akure is currently one of the beneficiaries of World Bank Project (i.e. Millenium City Development Goal). Akure is divided into two local government areas. These are: Akure North and Akure South local government areas (fig 2).

According to Olamiju & Oyinloye (2015), in Omale (2017), Akure is made up of two Local Government Areas (LGAs), namely: Akure North and Akure South with corresponding land area coverage of 676.7 km^2 and 318.0 km^2 respectively. Each of these Local Government Areas constitutes a sub-region that forms the Akure region. The state capital has witnessed tremendous growth in its population, which has increased from the influx of people from neighboring towns, villages and other cities. The city is relatively peaceful and the urban renewal scheme of the Governor Mimiko administration has enhanced the visual appearance of the urban built environment (Omale, 2017)
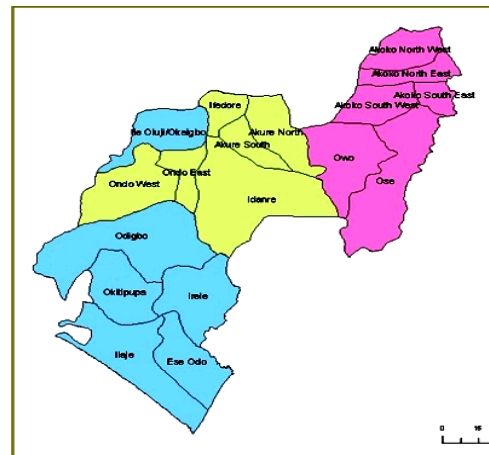
Fig. 1: Map of Nigeria Showing Ondo State. Fig. 2: Map of Ondo State Showing Akure
Source: Google images

3.3 Case Studies

3.3.1   Case Study 1 – Chicken Republic Orita Obele Junction, along Akure/ Ilesha road, Akure, Ondo State

Below is the summary description of color schemes used in the interior of the building as shown on plates 1 to 4.

- **Dining hall wall surfaces:** Cream and white
- **Ceiling:** white, red
- **Floor:** cream
- **Furniture:** white, red, pink
- **Accessories:** white, red (wall paintings)

Plate 1; Approach view of Chicken Republic   **Plate 2;** Interior view of Chicken Republic
Source; Researcher's Fieldwork (2019)

Plate 3; color of interior wall   **Plate 4;** color of floor, ceiling and furniture
Source; Researcher's Fieldwork (2019)

3.3.2   CASE STUDY 2 – TANTALIZERS located at No.125, Oba Adeshida Road, Akure, Ondo State.

Below is the summary description of color schemes used in the interior of the building as shown on plates 5 to 8.

- **Dining hall wall surfaces:** white and brick coating

- **Ceiling:** white
- **Floor:** cream, red
- **Furniture:** white, red, pink, yellow
- **Accessories:** white, red (wall paintings)
- **Children play area:** multi-color wall of red, blue, yellow, pink, grey and green colors on red floor

Plate 5; Exterior of Tantalizers   **Plate 6;** Interior of building

Source; Researcher's Fieldwork (2019)

Plate 7; Picture showing floor and ceiling color   **Plate 8;** picture showing children play area

Source; Researcher's Fieldwork (2019)

3.3.3   Case Study 3 – Mr. Biggs

Location- ECWA Church Premises, Oba Adeshida Road, 1 Ondo street, Akure, Ondo State.

Plate 9; Picture showing exterior of MR BIGGS   **Plate 10;** picture showing interior
view

Source; Researcher's Fieldwork (2019)

Plate 11; picture showing color of floor, furniture walls and ceiling

Source; Researcher's Fieldwork (2019)

Color usage; Assesment of the colors in the interior, shown on plates 9 -11.

- **Dining hall wall surfaces:** Cream, turquoise and cyan
- **Ceiling:** white
- **Floor:** cream and turquoise
- **Furniture:** brown and gold
- **Accessories:** white, red

4. RESULTS AND DISCUSSIONS

4.1 Observations on visual data

After the visitation to study area, it was noted that all the sampled eateries had similar colors for some specific areas. For example all had same color of floor, and ceiling which is cream and white. The human mind associates white with cleanliness and mental clarity, also denotes light, purity, and innocence. White and cream colors are capable of brightening up spaces and uplifting the minds of people. Table 1 below is a summary of interior colors as used in the eateries studied.

Table 1. Summary of color schemes used in the interiors of the eateries

Interior spaces/Surfaces	Chicken Republic	Tantalizers	Mr. Biggs	Number of colors used
Walls	Cream & White	White & Brick Red	Cream, Turquoise & Cyan	2/3
Ceilings	White & Red	White	White	1/2
Floors	Cream	Cream & Red	Cream & Cyan	1/2
Furniture	White, Red & Pink	White, Red, Pink & Yellow	Brown & Gold	2/3
Assesories	White & Red	White & Red	White & Red	2

From table 1 above the following observations were made on color choices of interior spaces of the eateries pertaining internal walls, ceilings, floors, furniture and accessories as applied;

4.11. Walls: table 1 shows consistency in use of white, cream and red colors on the walls of the eateries. This appears to be in consonance with other major eateries around the globe as well. This showcases consistency with color application in interior walls of eateries and so a high population of customers is expected due to attraction associated with red color and appetite in food (Gyaan, 2018). Red was however garnished with white and cream on interior walls (plates 4, 7, 8, 10, and 11) to avoid monotony and similarities to traditional worship in the study area.

Turquoise color was also noticed on the walls and floors of Mr. Biggs, this is to break monotony and to carve out circulation areas on floors. However, patronage is expected to be high as well as social interaction expected especially with the use of white and cream. Bright interiors are certainly improved alongside artificial lighting due to bright color choices of cream, white and red walls within these interiors.

4.1.2. Ceilings: there is a consistent use of white color for ceilings in all the three eateries. It is common to use white on ceilings so as to quickly spread light within interiors and contrast the use of other colors on walls. This phenomenon also enhances brightness of interior spaces from natural light through windows as well as artificial light from electric bulbs. White basically forms a background for every other color to be visible and easily identified. However, only Chicken republic (plate 2, and 4) had a minimal touch of red on its ceilings and Tantalizers (plate 6). This breaks monotony and creates a deviation from the norm.

4.1.3. Floors: cream color was found consistent on the floor tiles used in all the three eateries except for Mr. Biggs that had a touch of turquoise on its floors to break monotony and accentuate circulation and dining areas. Cream color is bright enough to light up passage ways and circulation spaces without much reflectance of light or other bright colors affecting customers' eyes, and it is easier to maintain cream color on floors than white color. While all three eateries consistently used cream color on tiles, Tantalizers added a touch of red in its children's play area for defining such space and Mr. Biggs added a touch of turquoise for identifying circulation space.

4.1.4. Furniture: white and red color were consistent with Chicken republic and Tantalizers (Plates 2, 3, 4 and 7), with a touch of pink and yellow on furniture, probably to enhance individual logo colors. However, Mr. Biggs chose brown and gold (plate 10 and 11) for interior furniture. This is purely a deviation from the other two eateries and can be clearly seen why there is a deviation when Mr. Biggs furniture color was compared to the colors of the external walls at the entrance of the building (plate 9). This style appears unique and different from the other two eateries and it is also commendable.

4.1.5. Accessories: there was consistent use of white and red color on the accessories in all three eateries (plates 3, 6, 7, 8 and 10). The accessories consist of designs and artworks on walls, tables, window blinds and burglaries as well as decorations around the interiors of the eateries. This is understandable, as red is an enhancer for appetite and eatery owners often use this design principle for more customer patronage. However, red was rightly applied on the interiors with a touch of white so as to tint or reduce the intensity of red color.

It was also observed that yellow color was minimally applied in all the three eateries that were studied, while green color was completely absent in the internal colors except for natural green plants outside the three buildings.

Color application on walls, floors, ceilings, furniture and accessories was carefully done so that the colors won't go beyond three per applied surface (See table 1 for number of colors).

4.2 Demography of Respondents

Four variables were considered under the demographic distribution of respondents, these were Sex, marital status, educational level and occupation of respondents. Results show that **52% of respondents were males**, and **48% were females**; indicating a slight but close difference in the ratio of males to females used for the study, since the study could not achieve a 50:50 ratio of men to women. This result is not an indication of the frequency of which of the sexes visit eateries more often, but an attempt to get equal views from both sexes/gender.

For marital status of respondents, it was observed in this percentage; **single – 30, married – 36, divorced – 18, separated – 14, widowed – 2.** The result showed that married people patronize eateries more than others. While this may be good for marriage and married couples and may portray married couples as united and intimate, the study also found that singles ranked second highest in patronage with a 30% rate, indicating that singles also have a high patronage of eateries. However, divorced costumers show an 18% patronage of eateries, which is half of the percentage of married people. Could this mean that there are half divorced people as married ones in the study area? It also showed that 18 out of every 100 people who visit eateries are divorced. However, 14 percent of respondents are separated couples while 2% were widows.

Further results show that respondents with tertiary education were highest patrons (82%) of eateries in Akure, while this may indicate that highly knowledgeable people patronize eateries, results also show that 6% have secondary education, while 12% have primary education and other forms of education such as unskilled crafts like barbing etc.

Results also indicate that private workers patronize eateries better than government workers with a 42% to 18% patronage. Does this result reflect that private workers earn more than government workers or private workers just want to eat out more than government workers? Finally, respondents were asked "*how often do you visit eateries*?", results show that half of respondents indicating 50%, visit eateries very often while 38% do so often. When positive responses of very often and often were summed up, it indicated that 88% of respondents visit eateries all the time compared to 10% who seldom visit and 2% who rarely visit. This showed that a high number of respondents visit eateries a lot which is also an indication that eateries in Akure have a high level of patronage of customers. Results from the demographic study will be used to study the population's relationship with interior color of eatery spaces.

4.2.1 Responses on color effects on respondents

On the psychology of colors as perceived by respondents, four major questions were asked amongst others and respondents were asked to choose an option from a Likert scale with five options from strongly disagree = 1, disagree = 2, uncertain = 3, agree = 4 and strongly agree = 5. The options show a progression from a low score of 1 to neutral score of 3 and then a high score of 5 for strongly agree. The questions ranged from color attraction to place, color as enhancer for social interaction, color effects on respondents as well as color preference options for interiors by respondents. Below are results and discussions emanating from the results as presented;

Table 2: Color of your surroundings influence your emotions and state of mind

Measuring scale	Frequency	Percent
Strongly disagree	6.0	6.0
Disagree	48.0	48.0
Uncertain	8.0	8.0

Agree	20.0	20.0
Strongly agree	18.0	18.0
Total	100.0	100.0

Source; Researcher's Fieldwork (2019)

On the influence of surrounding color on the emotions and state of mind of respondents, table 2 showed that more than half (54%) of respondents disagree that surrounding color has influences on their state of mind. While 20% agree, a combined 38% both agree and strongly agree, indicating that more than one third of respondents show positive perceptions of surrounding color having influence on their emotions and state of mind. However, 8% were uncertain whether color influenced their emotions. This result indicates that more than half of respondents (54%) do not perceive the influence of surrounding colors on emotions and state of mind.

Table 3: Does color attract you to this eatery?

Measuring scale	Frequency	Percent
Strongly disagree	6.0	6.0
Disagree	22.0	22.0
Uncertain	12.0	12.0
Agree	52.0	52.0
Strongly agree	8.0	8.0
Total	100.0	100.0

Results from table 3 show that 52% of respondents agree that colors of eateries attracted them to visit and patronize these eateries. When this result was summed up with the percentage of respondents who strongly agree, the study showed that 60% of respondents indicate positive responses that colors are attractions to eateries. Although 20% disagree, another 6% strongly disagree that colors are attractions to eateries. This also means that 26% of respondents disagree with color as the reason for attraction to eateries.

Table 4: Colors in the Interior Spaces Provide Comfort and Familiarity to Enhance Social Interaction

Measuring scale	Frequency	Percent

Strongly disagree	12.0	12.0
Disagree	10.0	10.0
Uncertain	20.0	20.0
Agree	44.0	44.0
Strongly agree	14.0	14.0
Total	100.0	100.0

Table 4 shows that 44% of respondents agree that color of interior spaces in eateries provide comfort and familiarity to enhance social interaction. The result showed that 58% of respondents indicated positive response on colors enhancing social interaction. This figure 58% is close and similar to 60% positive response on table 3 for color attraction to eateries. Comparing both results show that color does not only attract people, but enhances social interaction. However, while 20% of respondents are uncertain about color and social interaction, 22% oppose the view completely.

Table 5: What Colours Would You prefer most For Interiors of eatery Buildings?

Preferred colors	Frequency	Percent
White	40.0	40.0
Yellow	10.0	10.0
Red	2.0	2.0
Cream	30.0	30.0
Others	18.0	18.0
Total	100.0	100.0

In table 5, respondents appear to prefer white color (40%) in interiors of eateries compared to cream (30%). 10% of respondents prefer yellow color, while 2% preferred red. Results further showed that 18% of respondents preferred a wide spectrum of other colors not specifically mentioned. While this results negate the common use of color preference for interiors of eateries, 30% of respondents preference for cream color in interiors is close to yellow and orange color usage that is widely accepted globally. Though respondents are neither color experts, neither building professionals nor designers, results indicate that respondents are highly mixed on diverse opinions on interior colors in eateries.

Table 6: How Does the Color Preferred Affect You?

Likely Affects	Frequency	Percent
Makes you feel comfortable	30.0	30.0
Affects the volume of space by making it smaller or bigger	6.0	6.0
Makes it look beautiful and appealing	44.0	44.0
Others	20.0	20.0
Total	100.0	100.0

In table 6, respondents (44%) appear to suggest that white and cream make eateries beautiful and appealing, when table 5 and 6 were compared. However, 30% of respondents also suggested that their most preferred colors make them feel comfortable within these eateries. Although 6% of respondents could not decipher whether the colors affect the volume of interior space, but 20% of respondents showcased that a wide spectrum of colors that were not specifically mentioned have effects on their psyche.

4.3. Further discussions

While colors continue to be a creative yet challenging aspect of eatery designs, colors can be used to achieve specific moods on customers to improve appetite and enhance patronage. Specific findings from this study show that consistency of use of same color choices was observed on the walls, ceilings, floors, furniture and accessories of all the three eateries studied. While similarities were also observed, it is also note worthy to mention that monotony could not set in as the designers were able to manipulate the color schemes appropriately.

It appears that using maximum of two or three colors at a time (table 1) tend to keep the schemes simple thereby making the most statements and impact rather than applying beyond three colors per surface. It also appears like there is flow or connection or alignment between adjacent and opposite walls in the manner the colors were either complementing or contrasting each other. Using more than three colors per surface may tend towards chaos or color riots especially if the colors don't complement each other.

In Akure, while a high patronage of eateries is observed, it was noticed that married and educated people constitute a large percentage of people who patronize these eateries the most. The study also found that more than half of the respondents (54%) disagreed on colors of their surrounding having any influence on their emotions or state of mind, although, more than one third (38%) agreed. But it was also clear that 60% of respondents are attracted to eateries because of the colors schemes used within these eateries and this happens to support previous studies (Singh 2006). Also, almost the same percentage (58%) agrees that colors of interior spaces of eateries provide comfort and familiarity and are capable of enhancing social interaction amongst customers/users of these eateries. While 70% of respondents prefer white and cream as interior colors for eateries, it appears that respondents believe that their preferred color choices makes them feel comfortable and makes the eateries appear appealing.

This study appear to partially support Lohrey (2017) findings that applying bold primary colors like red, yellow and green are not only appropriate for fast foods and restaurants but also establish quick turnover, as patronage and therefore turnover was found to be high in the cases studied but only red was explicitly applied with minimum yellow and green color was not used at all. It appears red was used to draw attention and attraction for the eyes which also supports Nezhad & Kavehnezhad (2013), while yellow was played down. The study is also in consonance with Kerfoot et. al (2003) study, since it applied turquoise color (which is a combination of blue and green colors) with caution and downplayed in little quantities (plate 10 and 11) and this did not create disturbing effects from color castings resulting from combination of cool colors and other colors - this is commendable. Cool colors were rarely observed in all the eateries studied, probably designers intentionally do not want customers to feel more relaxed and comfortable so that they could leave on time or maybe the designers do not want cool colors to interact and combine with light sources thereby causing gloomy and depressing moods which could reduce customers' appetite. Findings from this study also negate Lohrey (2017) outcome that white color isn't the best choice for restaurant designs, as white color was explicitly applied on the ceilings, walls, furniture and accessories of all three eateries studied (except floors), and glare or any contrary opinion on the application of white within the interiors of all the eateries studied was not recorded. Finally, the study found that red color was explicitly used in all three eateries so as to

increase appetite and patronage, this agrees with findings from Nielson (1990), and Gyaan, (2018) studies.

5. CONCLUSION

This study was able to show that interior colors of eateries have some sort of influence on customers' moods and feelings. While the traditional or conventional use of warm colors of red, yellow and orange were not used extensively as in most famous eateries, the study showed that respondents preferred white and cream in interiors of eateries compared to red, yellow and orange that are more common to eateries. The eateries in Akure however, used more of white, cream and red colors in interiors of eateries than other colors. It appears like the findings from this study negate previous findings on colors and appetite for food, as most respondents do not perceive that colors of surroundings have any influence on their emotions and state of mind. This may be understandable as the respondents for this study were neither color experts nor professionals of any sort, but just everyday people who were going about their daily legitimate businesses. In summary, the study found out that geographic location and cultural affiliations of respondents could be likely determinants of perceptions and interpretations of interior colors especially in eateries.

In conclusion, there may be the need to carry out similar studies in other geographical locations so as to compare findings from this study with other climes and cultures for consistency or otherwise. This paper recommends that the use of traditional/conventional eatery colors should still be maintained in eatery designs, but with little unique modifications, depending on the specific locations and cultures of people. However, the ideal eatery color designs should be kept simple and moderate like on all other color choices and not exceeding two or maximum of three colors, so as to generate more emotions for maximum benefits of customers and owners of the eateries as well.

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