

Colour Perception and Preference of Primary Schools Pupils in Zaria, Nigeria

^{*a}Abdullahi, A. M. and ^bAhmed, B. K.

^aDepartment of Industrial Design, Ahmadu Bello University, Zaria, Kaduna State, Nigeria

^bDepartment of Printing Technology, Kaduna Polytechnic, Kaduna, Nigeria

*Correspondence email: aminuabdullahi481@gmail.com

Abstract

The use of colour preference for marketing is a thing of concern for today's marketing strategy, because colour has a great role in making art and design products to be liked or disliked. Therefore advertising designers should strategize ways of adding values in the application of colours to command the desire of buyers. Existing researches have proven that colour preference has similar findings on abstract colour preference for both children and adult. Very few researches were done on specific colour preference for adult. Unfortunately no researches were done for children on specific colour preference. Most studies done on colour preference for children, considered the colour without linking the colour with a specific item. This study strives to fill the gap in coming up with specific colour preference for children. Pencil and balloon were used as tools as it has been done for adults with other objects. Designers, printers and production industry could use the outcome of the study to come up with colour scheme for the production industry. The study is only about improving advertising strategy to command the desire of buyers. It is therefore not concerned with the academic performance of the participants. However, the psychological study of colour attested that a person surrounded with the colour he appreciates make him comfortable and derives pleasing experience. In view of the above, the primary school pupils were selected to ease the collection of data as going to house to house would be a difficult task and hard to control the pupils.

Keywords: Colour, Perception, Preference, Abstract and Specific

INTRODUCTION

Colour perception is the people's sensitivity of the reality of colour in terms of hue, value and intensity. One of the most fascinating aspects of the perception of colour is that people have relatively strong taste of particular colours and colour combinations much more than other colours. Daniel (2002) viewed that, the tendency of everyday visual perception is to bisect the visible world into two parts, that is colour and object. Thus, objects are mostly perceived much with their colours. Preference on the other hand is the choice of people's most preferred colour. When people are facing objects in different colours, they choose their favorite one and avoid other colours they dislike. The colour chosen by people is therefore their colour preference. The research about colour preference could date back to Goethes theory of colours.

The role colour plays in design is considered as the strongest and fastest element concerned with delivering a message, attracts the attention of viewers, affects their emotion and promotes sales of a design products items. Colour is used to communicate to audience and emphasize a meaning of

an artwork. The colour applied to a product plays an important role in a consumer's purchase decision (Grossman in Miao 2015). Silver (1987) states that advertisement in colour sales ten to fifteen times more than the same advertisements in black and white'

Experts have done lots of studies to better understand the colour preference on the special group of people. Mundell, (1993) found the most colour choice for a car are blue, gray and red; this is because people love cars with these colours more than other colours. In responding to needs of car users/owners, the car manufacturing industry should produce cars in blue, gray and red colour relatively in higher quantity more than other colours. However, red-colour is the first choice for carpet and cream for wall paint. The study on Abuja residents shows that people's colour preference on wall, floor, and ceiling is quite consistent, but the choice for sitting room chairs is varied (Shehu 2019). Idris (2018) observed that men prefer black shoes than any other colour but, the choice of colour for shoes varied among ladies. The shoe production industry should therefore produce black shoes for men in higher quantity than with other colours, for ladies wear, the colours may vary relatively at equal quantity. Albers (1996), Daniel (2002), and Halse (1998) expressed that the common colour preference of children at the age of 5-9 is red. Manuel (2000) in Miao (2015) postulates that, colour preference changes with ageing, from childhood to adolescence and from object to object. Similarly, Burkitt (2003) also stated that children always choose warm colours rather than cold and dark colours.

Existing research shows that colour contains quite significant information and it does not only affect people's emotion, cognition, and physical reaction, but also series of physiological process (Elliot, & Maier, 2014). Study on peoples' colour preference and their psycho reaction have an important realistic implication to advertising industries. Julius (2011) viewed that colour attracts and colour excites interest. People choose manufacture goods pleasant to their taste. To satisfy the need of customers, there is need for advertising designers to strategize ways of adding values in the application of colours. This in turn commands the desire of buyers.

In view of the above, this paper attempted an investigation on Colour Perception and Preference of children from three perspectives: the aspect of colour preference of children in general term, the aspect of colour preference of children on specific object and the third one to determine whether there is difference of colour choice for different objects amongst children. Industries in Nigeria will use the study to determine the quantity of production items in accordance with the frequency level of every colour people prefer.

To achieve the goal of the study, one objective was formulated; to identify specific colour preference of children based on different objects. One research question and one hypothesis were formulated to achieve the objective of the study. The Research Question is; what is the specific colour preference of children based on different objects? The Hypothesis is thus expressed as H¹. There is no significant difference in colour preference of children based on different objects. The data generated was analyzed using percentages and analysis of variance (ANOVA) to draw inference.

Colour preference has significance influence on individuals and groups, it is accepted by psychologists, social scientists, fashion designers, graphic designers, printers, and so forth (Joanne, Eicher, Decker and Mary 1963). It is therefore very important for designers and industries to

understand the use of colour in design as a vital tool for mass production process. It is quite significant to recognize the meaning of different colours within different people to its importance applications across a vast range of industries. Using appropriate colour for a specific object would make design products be more acceptable and realize pleasurable experience by the users. The result of this study will help designers, printers and other production industries in coming up with the colour scheme to be used for children teaching aids, books, educational materials, toys and other industrial products for mass marketing. Moreover, to the best of researcher's knowledge there is no study conducted on specific colour preference for primary school pupils in Zaria in particular and Nigeria as a whole. The study is limited to seeking means of improving advertising strategy to command the desire of buyers. It is therefore not concerned with the academic performance of the participants. However, psychological study of colour attested that a person surrounded with the colours he appreciate make him comfortable and derives pleasing experience.

Colour is only an attribute of the objects and it does not affect the functionality of objects, despite that, people still choose objects with the colour they prefer. Palmer *et al.* (2013) state that some existing researches have proven that colour preference has similar findings on abstract colour preference for both children and adult. The problem of the study is therefore, very few researches were done on specific colour preference for adult. The research conducted on specific colour for adult shows that there is no consistency as it has been seen on the choice of cars, shoes, etc. This confirms that for different items, there are different choices of colour. But, unfortunately no researches were done for children on specific colour preference. Most studies on colour preference for children, considered the colour without linking the colour with a specific item. Specific colour preference of children was completely untouched by scientific investigation in Nigeria despite its importance.

METHODOLOGY

Waziri Lawal Primary School in Zaria Local Government Area was used as the case study. The study adopted a pre-test quasi-experimental design to find out the colour preference among children between the ages of six and twelve and to determine whether there is or no significant difference of colour preference by children on different objects. The population of the study was 375 pupils. A probability sampling method was adopted, which according to Olive and Gordon (2012) is vigorous and tends to produce accurate and more representative samples than non-probability. Probability sampling implies that every element of the population has an opportunity for being included in the sample, such as convenience and quota. A sample of 12 pupils was collected from each class (1-6) making the total of 72 pupils sampled through random sampling. Ballot technique was used to attain at the 72 pupils considered for the study. The study decides to use primary school pupils for convenience as roaming about from house to house would be a difficult task and hard to control.

The study used observation as the instrument of the study. Identification tests were employed for the record of colour preference on the observation sheets. Pencils and balloons of various colours were used as the tools (objects) for the identification test.

The pupils involved for the study were controlled in such a way that their choice of colour does not influence each other. This was done by addressing the pupils that the items displayed would

be giving to them are free of charge; therefore they should pick them based on the interest of their colour preference without making reference to the colour choice of their friends. The colours used for the study includes red, blue, yellow, orange, green, purple, pink, black, silvery, golden and white. Each colour was made available to the number of each pupil so that the pupils could have equal chances to select the colour they preferred. The items displayed were available on the same sizes and shapes to avoid any influence while making the colour preference.

Steps

- i) Pencils illuminated in various colours were displayed at one table and the balloons of different colours were also displayed on another table.
- ii) Only one pupil at a time was allowed to go to the tables where the items were displayed to select his favorite colour.
- iii) The pupils would go to the first table and pick pencil and then move to the second table and pick balloon.
- iv) At the third table the pupils showed the items picked to the researcher who observed, identified and recorded the colour preference of each pupil on the observation sheet.
- v) The study was conducted personally by the researcher with the help of research assistants in two days.

RESULTS AND DISCUSSION

Percentage and analysis of variance (ANOVA) were the tools used for the data analysis.

Research question: what is the specific colour preference of children based on different objects? Two tools were used as means of identification, these are Pencil and balloon. A specific colour preference of children is deduced from the abstract.

Results of the data obtained using pencil shows that 29 respondents have shown their interest in yellow colour as their colour preference which corresponds to 40% as the highest, followed by red colour chosen by 9 respondents which corresponds to 13%, then blue colour was chosen by 7 respondents (9%), and only one person had picked pencil illuminated with black as the preferred colour which corresponds to 2% as the least colour preferred by children. The total number of respondents who showed interests in red, blue and yellow colour were 45, corresponding to 62%. Other colours were chosen by 27 respondents which correspond to 38%.

The result of the data obtained using balloon as tool of identification shows that 32 respondents picked purple balloon as the colour most highly preferred which corresponds to 44% as the highest. Blue colour is the next to purple preferred by 9 respondents which corresponds to 13%. The result shows that children do not have high interest in the choice of balloon with silver, black and white colour.

The total number of respondents who showed interests in red, blue and yellow colour was 19 which correspond to 26%. Those who showed interests in secondary colours were 39 respondents which correspond to 54%. Those that prefer tertiary/neutral colours were 14 respondents which correspond to 20%.

Interpretation

The result obtained from the use of pencil shows that the total number of respondents who showed interests in red, blue and yellow colour was 45, (62%). The result corresponds with Ogunlola (2003) and Halse (1998) both expressed that young children prefer brilliant colours specifically primary and secondary colours with red as a priority. The study also agreed with Silver (1981), Halse (1998) and Ogunlola (2003) that psychologically, the difference of effect between red and yellow is not significant because both colours are regarded to as primary, warm and sedative.

However, the result revealed that yellow is the specific colour for pencil preferred by children. By implication this finding did not correspond with Ogunlola (2003), Silver (1981) and Halse (1998) and therefore red colour cannot be generalized as the colour preferred by children for all objects. The result obtained from the second item shows that purple is the specific colour for balloon preferred by children. The result is contrary to the views of Albers (1996) Daniel (2002), and Halse (1998) that the common colour preference for children is red. The result shows that purple colour is the specific colour for balloon preferred by children, this goes in line with Albers (1996) and Daniel (2002), that a child prefers things according to his taste with a lot of awareness and gradation in colour. A hypothesis was made with H01 indicating there is no significant difference of colour preference by children based on different objects. Alternative hypothesis to reject that.

Table for significant Difference on the Choice of Specific Colour; Yellow for Pencil and Purple for Balloon

Significant difference of colour preference for children based on different objects					
Frequencies	Pencils	Balloons	Df	Calculated X ¹	crit. X ²
Observed frequency	40	49	1	0.57	3.84
Expected frequency	72	72			

The table above revealed the frequency of the two items used for the study. The colour preference of pupils for pencil is yellow colour with the highest frequency of 40, and for balloon is purple colour with the highest frequency of 49. The degree of freedom is 1 under 0.050 level of significance and 1 difference (df) to obtain the critical value X² of 3.84

Critical value, $X^2 = 3.84 \geq$ Calculated $X^1 = 0.57$

Since critical value of X² is greater than calculated value X¹, the null hypothesis could be accepted, which implies that there is no significant difference in the level of specific colour preference of children based on pencil and balloon objects. By implication, in the absence of yellow pencil, a child may prefer to pick purple pencil and vice visa, in the absence of purple balloon, a child may prefer to pick purple pencil.

Findings from the Hypothesis

The hypothesis states that, there is no significant difference in colour preference by children based on different objects. The inference derived from the null hypothesis is accepted which implies there is no significant difference in colour preference by children based on different objects i.e. yellow for pencil and purple for balloon.

What are the specific colour preference of children for the choice pencil and balloon objects? The study discovered the following as findings;

- a) The study finds that children's specific colour preference for the pencil object is yellow colour. This indicates that children preferred to use pencil illuminated with yellow colour more than with any other colour.
- b) The least specific colour preference of children is the pencil illuminated with black colour. This indicates that children do not like pencil illuminated with black colour.
- c) The study finds that children's specific colour preference for the balloon object is purple colour. This indicates that children preferred to play with balloon illuminated with purple colour more than with any other colour. Blue balloon is the colour next to purple preferred by children.
- d) The study discovered that children do not have interest in balloon with silver, black and white colours.
- e) The abstract colour preference of children found in this study is in line with the previous researches that children preferred brilliant colours.

CONCLUSION

Psychologically, children derived pleasurable experience in using pencils illuminated with yellow colour higher than any other colour. The preference showed that yellow colour is followed by red, and then green. The specific colour for the balloons is purple colour followed by blue and then pink. Lastly the study concludes that there is no significant difference in colour preference by children based on pencil and balloon objects. Therefore the choice of pencil and balloon colour can be generalized among primary school pupils. The study recommends that:

- a) The pencil production industries should produce pencils with yellow colour relatively in higher quantity than any other colour followed by red and then blue.
- b) Balloon production industry should produce balloons with purple colour in higher quantity than any other colour followed by blue and then pink.
- c) Designers, printers and manufacturers of children's educational materials and wears should use warm colours (primary and secondary) in the design and manufacturing of products.
- d) The study recommends for further experiment on the colour preference in children using the same tools (pencil and balloon) at same location.

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