

Assessment of Psychology of Colour Preference on Textile Clothing among Students of Fct College of Education Zuba-Abuja

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ABSTRACT: Colour has been used by the people from time immemorial to enhance their visual and aesthetic appearance, which is simply seen as a tool of communication. Studies have revealed that clothing colour have been expressed by the people to signify who they are, how they feel, their belief, social identity, self-images, aesthetics and emotions. Therefore the research is aimed at determine colour preference for clothing among the students to enhance possibility of fashion taste consequent upon designing with such colour preference. As fashion and style evolves new trend, individuals especially youngsters are associated with various choice of colours for clothing, fashion adornment, festival and body care of all sorts. The research adopted studio exploration, qualitative and quantitative methods. The population consists of both male and female NCE students of the FCT College of education totaling four thousand five hundred (4,500) with sample size of three hundred and fifty four (354) randomly selected in accordance with Kredjcie and Morgan. The research adopted questionnaires and Fabric Colour Card (FCC) to collect data. Meanwhile, the FCC was subjected to simple percentage formula analysis. Findings of this study revealed that students are actually influenced by psychology of colour and colour blue seems to be on the lead of students colour preference. The study recommend among others that there should be an on-going engagement with the fashion industry to ensure the research remains relevant. Regularly colour update findings to inform industry practices and contribute to the evolution of colour trends in fashion.

KEY WORDS: Assessment, Psychology, Colour Preference, Textile Clothing.

I. INTRODUCTION

The role of colour in the development of societal civilization has been dated back to the early men in the primitive era, where their source of livelihood depends on magical art. The early men drew animal to be hunted on surface of caves, hills and mountains using blood of animals (red colour) and various extractions from plants and leaf fibers. Thereafter, spell is cast on the painting so that the picture of animal falls prey during game. As society developed, colour began to be symbolic and serves as tool of identification for social and cultural identity. Particularly, colour clothing-related has a high attraction from the people, because of its significance as body coverings. To that extent Pemberton-sikes (2001) remarked that it does not matter how old the garment is or how many times it is worn, one feels good in it, because it is always gets you noticed because of colour. Numerous studies have identified the effects of colour on people's reactions. The author further classified human beings as having "warm" or "cool" undertones depending on their unique combination of melanin, carotene, and hemoglobin. The undertone one is born with never changes; it simply deepens with tan and fades away with age, the author concluded. Meanwhile, personal reactions to colour are a result of social and cultural background, economic levels, and environmental influences. Colour can attract, repel, advance, re-cede, stimulate, or quiet. Also, colour affects one's feelings about personal appearance and wellbeing and as well affects other persons' impressions and acceptance of us.

Davies (2015) asserts that, colour psychology is not a science that can be quantified with precision. For every colour, there is both a psychological impact as well as subjective meanings experienced by individuals. Textile designers have long recognised the importance of colour to the design process. Not only does it qualitatively alter all other elements and may in fact serves as its own subject, i.e. exert influence through its innate qualities (Vodvarka, 2000). Colour affects the way we perceive the world, evoking certain emotions and feeling (London Image Institute, 2020). They can alter our moods and sense of wellbeing either consciously or subconsciously our minds understand that all colours have deep-seated meanings and natural associations. It is against this background that, this research establishes colour psychology to determine preference choice of colour among the students for onward transmission to cloth and fashion making.

So that student can wear a desire colour of their choice for comfort and wellbeing which will in turn improve their better performance.

Statement of Problem : Body comfort toward optimum performance have form basis for clothing ergonomics in the recent time. It has been observed that, the students do not have adequate knowledge of right choice colour in clothing, as little it may sound, it actually contribute to their ability to acquire and facilitate learning. To the extent that, colour of their clothing is to a large extent admit them socially qualify to asserts their prestige and self-esteem among their classmate. The choice of colour they make may sometimes disregard their contribution in the learning process, whereas, if right choice is made, they are well contained because of level of colour reception they obtain. The study observed that, inadequate knowledge of psychology of colour being a determinant factor to right decision in colour selection impedes speed and smooth performance of students academically.

Objectives

- To assess the impact of psychology in choice of colour among students
- To determine colour preference in textile clothing among students.

Research Questions

- To what extent do psychology impact choice of colour making among students?
- How does colour preference influence textile clothing among students?

II. LITERATURE REVIEW

The significance of colour as a major element of design is immeasurable. Apart from being a design element, its visual encounter is pervasive in almost everything we see in the world around us, because colour is perception in itself and we are able to see colour through the aid of our eyes. When light strikes on an object it is perceived by the eyes and processed in the brain thus information is revealed as to certain colour (i.e. red, blue or yellow) the object has. Objects reflect light in different combination of wavelengths while the brain interprets the wavelength as a phenomenon referred to as colour (Adeoti and Ejiogu, 2017). Web Exhibits (2017) affirms that Sir Isaac Newton (1642-1726), a scientist was the first to postulate the theory spectrum, giving us awareness of colour in light through his experiment published in 1672. His understanding of rainbow led to refracting white light with a prism, resolving it into its component colours: red, orange, yellow, green, blue and violet. Newton set up a prism near his window, and projected a beautiful spectrum 22 feet to the far wall. Light enters the prism from the top right, and is refracted by the glass. The violet is bent more than the yellow and red, so the colours separated. Artists were fascinated by Newton's clear demonstration that light alone was responsible for colour. His most useful idea for artists was the conceptual arrangement of colours around the circumference of a circle, which allowed the painters' primaries (red, yellow, blue) to be arranged opposite their complementary colours (e.g. red opposite green), as a way of denoting that each complementary would enhance the other's effect through optical contrast (Adeoti and Ejiogu, 2017).

Colour is one of the effective factors in a space which influences expression of one's emotion. A single colour can have series of meanings and interpretations to various people in various regions of the world. For instance, red means danger in Nigeria while, it is interpreted as love in the Britain, Chinese sees white as sadness but sees in contrast by the Europeans as purity, virginity and calmness. De Bortoli and Maroto (2001) remarked that, Asia interpret orange as positive, spirituality and life-affirming colour, whereas, in the United States, it is a road hazards, traffic delays and fast-food restaurants. Wright (2008) defines psychological properties of colours as "the effects of the electro-magnetic radiation of light on human mood and behaviour-a universal, psychological reaction, which is not as heavily influenced by culture, age and gender as it is generally thought. The author further affirms that, there are psychological colours which includes red, yellow, and blue. They relate respectively to the body, the mind, the emotions, and the essential balance between them. According to Birren (2006), colours have many emotional impacts namely; temperature, strong and weak, hard and soft, and active and calm. The author further added that, for hardness and softness, brightness and low saturation convey calmness as opposed to stronger contrast and saturation, which convey activeness. Warm colours are those that are vivid in nature such as red, and yellow increases arousal more than cool colours like green and blue. In support of Birren argument, Itten (1973) claimed that, red is always active, while blue is passive from the point of view of material space. He also viewed colour from spiritual dimensionality and remarked that, blue seems active and red is passive, meanwhile blue is always cold and red is warm. Also, blue is always shadowy, and tends in its greatest glory to darkness. Ehen blue is dimmed, it falls into superstition, fear grief, and perdition,

but always it points to the realm of transcendental. Moreover, Greene, Bell, and Boyer (1993) stated that, warm colours increase stimulation compared to cool colours. According to Yoga philosophy, it is believed that, colour can be therapeutic in nature and has been linked to seven chakras of the body. This was considered by Kopacz (2003) to be energy center within the human body, but contrarily argued that, it belongs to a belief system originating from the Hindu scriptures known as ‘Upanishads, dated first Millennium BCE. The author further elucidates that, under the colour-chakra theory, colours are associated with body functions and dysfunctions within each chakra area. For instance; Red: Activates the circulation system and benefits the five senses and is used to treat colds, paralysis, anemia, ailments of the bloodstream and ailments of the throat problems. Blue: Raises metabolism and is used to stabilize the heart, muscles and bloodstream; it treats burns, skin diseases, glaucoma, measles and chicken pox, and throat problems. Green: Strengthens bones and muscles, disinfects bacteria and virus, and relieves tension; it treats malaria, back problems, cancer, nervous disorders, and ulcers and manages heart problems and blood pressure (Kopacz, 2003).

III. METHODOLOGY

This study employed mixed-methods design incorporating qualitative and quantitative approach as well as studio exploratory method. The design adopted was survey research using descriptive analysis. Meanwhile, the population consists of all the four thousand five hundred (4,500) students of the FCT College of Education, Zuba Abuja Gwagwalada Area Council of the FCT, Abuja, Random sampling technique was adopted to select three hundred and fifty four (354) students from the study population based on Krejcie and Morgan (Nizah, 2023). The study makes use of Psychology Preference Colour Choice (PPCC) questionnaire containing fifteen (15) items and Fabric Colour Card (FCC) containing 21 colours to collect data and interview. For decision rule, any item tag ‘YES’ was accepted as positive response, while items tag ‘NO’ were disagreed upon. The data from the FCC were matched with the responses from the respondents resulting at the findings and multiply by the number of times they occurred according to preference selection using simple percentage conversion formula.

Analysis/Procedure

Studio Exploration 1: The FCC was prepared in the studio of FCT College of Education, Department of Fine and Applied Arts. FCC is a canvass fabric which has been painted in acrylic pigment consisting 21 colour palettes. Each student was given FCC pallets randomly in the first instance and made to write their comments (YES/NO) at the back of FCC card based on colour given. Subsequently, YES-FCC was separated from NO-FCC.

Studio Exploration 2: Subsequently, students were made to pick their choice of FCC palette this time around and commented accordingly. This process was subjected to careful sorting, and collated to select related colour grouping. YES-FCC and NO-FCC in the Studio Exploration 1 were matched up with the Studio Exploration 2 for statistical analysis.

Presentation of results

Research Question One: To what extent do psychology impact choice of colour making among students?

Table: 1 Choice of colour psychology, n=354

FCC	YES		NO		Total	Total
	Freq.	%	Freq.	%		
Colour blue 100.0	282	79.7	72	20.3	354	
Colour white	278	78.5	76	21.5	354	100.0
Colour lemon-green	267	75.4	87	24.6	354	100.0
Colour beige	259	73.2	95	26.8	354	100.0
Colour green	255	72.0	99	28.0	354	100.0
Colour indigo	230	65.0	124	35.0	354	100.0
Colour black	220	62.1	134	37.9	354	100.0
Colour grey	218	61.6	136	38.4	354	100.0
Colour red 100.0	211	59.6	36	63.2	354	
Colour pink	205	57.9	149	42.1	354	100.0

Colour cyan		189	53.4	165	46.6	354	100.0
Colour purple	186	52.5	168	47.5	354	100.0	
Colour sky-blue	185	52.3	169	47.7	354	100.0	
Colour orange		132	37.3	143	62.7		354
100.0							
Colour wine		176	49.7	178	50.3	354	100.0
Colour brown	175	29.8	40	70.2		354	100.0
Colour yellow		162	45.8	192	54.2		354
100.0							
Colour magenta		156	44.1	198	55.9	354	100.0
Colour olive-green	146	41.2	208	58.8	354	100.0	
Colour lilac	106	29.9	248	70.1	354	100.0	
Colour tangerine		102	28.8	252	71.2	354	100.0

From the above table 1, findings revealed that blue colour has the highest pick by the 79.7% respondents with 282 YES-FCC by the respondents and 72 (20.3%) NO-FCC, implies that majority of students irrespective of their age, sex, social and cultural background has colour preference for blue based on psychological impact. Followed by white colour FCC picked by 278 respondents (78.5%) YES-FCC and 76 (21.5%) picked NO-FCC. 267 respondents subscribed to Lemon-green YES-FCC representing 75.4% while 87 (24.6) respondents picked NO-FCC, beige colour was picked by 259 (73.2%) respondents YES-FCC with 95 (26.8%) NO-FCC. 255 respondents representing 72.0% picked green YES-FCC and turned down by 99 respondents (28.0%) NO-FCC, indigo YES-FCC was picked by 65.0% of 230 respondents while 35.0% of 124 respondents picked NO-FCC. Colour black FCC-YES was picked by 220 respondents representing 62.1% and 134 (37.9%) NO-FCC.

Colour grey was picked by 218 (61.6%) respondents with YES-FCC, 136 NO-FCC respondents representing 38.4%. 211 (59.6%) respondents picked red colour YES-FCC while 36 (63.2%) respondents picked NO-FCC. Pink colour has 205 (57.9%) YES-FCC respondents, 149 (42.1). 189 representing 53.4% picked cyan colour YES-FCC and 165 (46.6). Purple colour has 186 (52.5%) respondents with YES-FCC and 168 (47.5%) NO-FCC respondents. 185 (52.3%) respondents picked YES-FCC and 169 (47.7%) picked NO-FCC. Orange colour was picked by 132 respondents representing 37.3% YES-FCC while 143 respondents representing 62.7% picked NO-FCC. Wine colour YES-FCC was picked by 176 (49.7%) respondents as opposed to 178 (50.3%) NO-FCC. 175 respondents representing 29.8% picked brown colour YES-FCC and 40 respondents making 70.2% picked NO-FCC. Yellow colour has 45.8% of 162 respondents with YES-FCC against NO-FCC 192 respondents representing 54.2%. Colour magenta attracts YES-FCC by 156 (44.1%) respondents and NO-FCC with 198 (55.9%) respondents. Olive-green YES-FCC has 146 pick 41.2% respondents and 208 respondents (58.8%) has NO-FCC pick. Lilac colour YES-FCC has 106 respondents representing 29.9% while 248 respondents picked NO-FCC making 70.1% while tangerine has 102 YES-FCC representing 28.8% and 71.2% of 252 respondents NO-FCC.

Research question Two: How does colour preference influence textile clothing among students?

Table 2: Colour preference for textile clothing among students, n=354

PPCC questionnaire items	YES		NO		Total	%
	Freq.	%	Freq.	%		
Do you associate specific colors with your emotions or moods?	160	45.2	194	54.8	354	100.0
Do you have colour preference in clothing?	297	83.9	57	16.1	354	100.0
Are there specific colours you prefer for casual wear versus formal wear?	248	70.1	106	29.9	354	100.0
Do you follow current colour trends in fashion when selecting your clothing?	122	34.5	232	65.5	354	100.0
Have you noticed any influence of colour preference among your peers in						

clothing choices?	273	77.1	81	22.9	354	100.0
Do cultural or societal expectations influence your colour choices in clothing?	171	48.3	183	51.7	354	100.0
Are there specific colours that hold cultural significance for you in clothing?	233	65.8	121	34.2	354	100.0
Do you consider colour when shopping for new clothing items?	321	90.7	33	9.3	354	100.0
Have you ever bought an item primarily because of its colour, even if it was not initially on your shopping list?	288	81.4	66	18.6	354	100.0
Do you believe that the colour of your clothing affects how others perceive you?	311	87.9	43	12.1	354	100.0
Have you ever received comments or compliments related to the colors you wear?	336	94.9	18	5.1	354	100.0
Are there specific colours you prefer to wear during different seasons?	261	73.7	93	26.3	354	100.0
Do weather conditions influence your choice of clothing colours?	151	42.7	203	57.3	354	100.0
Has your color preference in clothing changed over the years?	334	94.4	20	5.6	354	100.0
Are there external factors that have influenced these changes?	338	95.5	16	4.5	354	100.0

From the table 2 above, 160 respondents (45.2%) agreed in item one to associating specific colours with their emotions or moods, while 194 (54.8%) declined. Option two got approval of the 297 respondents (83.9%) which stated that do you have colour preference in clothing, while 57 respondents (16.1%) says otherwise. Option three stated that, are there specific colours you prefer for casual wear versus formal wear, this was supported by 248 respondents (70.1%) and disapproved by 106 respondents representing 29.9%. The item, do you follow current colour trends in fashion when selecting your clothing was met with 122 respondents representing 34.5% and 232 respondents making 65.5% meaning that, respondents do not follow current colour trends in fashion when selecting clothing. This option declared that, have you noticed any influence of colour preference among your peers in clothing choices, 273 respondents (77.1%) supported and 81 (22.9%) did not support. On the option, do cultural or societal expectations influence your colour choices in clothing was supported by 171 respondents (48.3%) and declined by 183 respondents making 51.7%. Are there specific colours that hold cultural significance for you in clothing was approved by 233 respondents (65.8%) and disapproved by 121 respondents making 34.2%.

On the option that, do you consider colour when shopping for new clothing items, 90.7% of 321 respondents says YES and 33 students representing 9.3% says NO implies that, students do not consider colour when shopping for new clothing items. Have you ever bought an item primarily because of its colour, even if it was not initially on your shopping list was supported by 288 respondents making 81.4%, while 66 respondents (18.6%) disapproved. Option do you believe that the colour of your clothing affects how others perceive you, 311 respondents (87.9%) obliged positively, 12.1% of 43 respondents responded in contrary. Have you ever received comments or compliments related to the colours you wear was supported by 336 respondents (94.9%) and 5.1% of 18 respondents did not. Are there specific colours you prefer to wear during different seasons is an option with 261 respondents representing 73.7% in favour as against 93 (26.3%) respondents who declined. Option, do weather conditions influence your choice of clothing colours attracted 151 (42.7%) respondents positively and 203 (57.3%) respondents otherwise meaning that weather conditions do not influence their choice of clothing colours. The option, has your colour preference in clothing changed over the years was supported by 334 (94.4%) respondents, while 20 respondents representing 5.6% did not support meaning that, their colour preference in clothing has changed over the years. 16 respondents representing 4.5% supported the option, are there external factors that have influenced these changes, while 338 respondents making 95.5% did not. This mean that, there are external factors that have influenced these changes.

IV. DISCUSSIONS


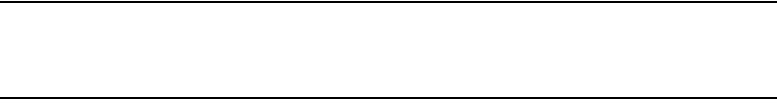

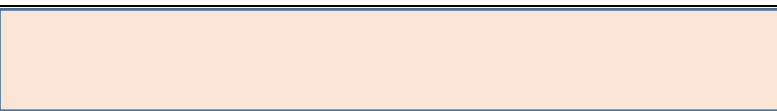
Colour psychology is to a large extent an indicator to colour preference. The findings of this study revealed diverse opinions regarding choice of colours ascribed to students due to influencing factors that are



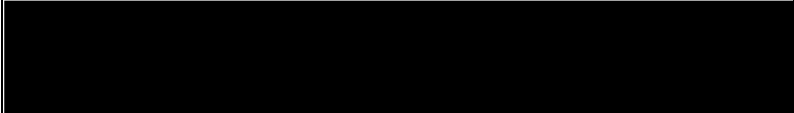
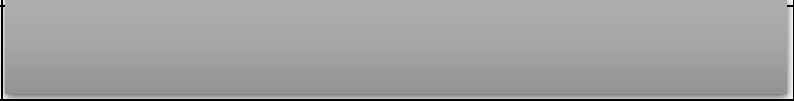
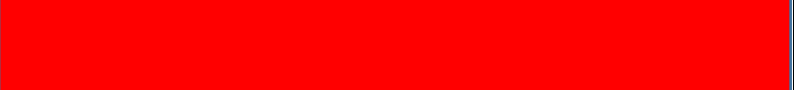










psychologically related. The opinion of students in colour preference as shown in the colour preference chart (table 3) using FCC cards is concurrent with the findings obtained from the questionnaire. In this instance, blue colour attained highest preference among the students with 79.7%, this is in concordance with the submission of Fallon (2023) even though, is from the angle of interior decoration. The author stated that a survey conducted by MasterBrand Cabinets, which polled over 700 consumers shows blue and green (61%), Gray and white (44%), Pink, terracotta, and beige (20%) were considered popular colour in the year 2023. An additional survey by Dulux Paints, conducted more than a decade ago, also pointed to blue as the most-liked colour, with 36 percent of people considering it their favorite the author added.

Interview conducted among the students revealed that blue is on the lead of favoured colours while relating their experience to blue jean. Many students opined that blue jeans stands out among fashion clothing and can match up with various occasions. To that extent, there is hardly any student interviewed without blue jean and this may have accounted for reason why blue colour is on the lead. Because it has been living with them and this is consequent upon their sense of attraction to blue psychologically. In the work of Parmon (2023) whose submission was based on fashion related colours stated the following colours as preference for clothing; black, white, blue, red, green, pink, grey, brown, beige, and purple. Relating colour to psychology, London Image Institute (2020) opined that colour blue is the most favourite colour in the world. Colour white took second in the hierarchy of choice selection having 78.5% of the students. The closeness of colour white after blue was related by many students as being religious and sacred. Since people are believed to be religious in this part of the country hence their affinity to white colour. Needless to mention that colour white evoke different moods in different ways among the people, Cherry (2023) associates and connects white to purity, innocence, cleanliness, simplicity and minimalism especially in fashion where white colour reflect light on clothing for obviousness. This submission actually reflects responses from the students during the interview. Other colours are arranged in sequential order of psychological impact in the table among the students.

On colour preference for textile clothing among students, it has been established by the findings that, colour clothing-related items in PPFPC scored a favourable percentage of support from the respondents. For instance, item two was specific of colour preference in clothing which attracted 70.1% of 248 respondents suggesting that majority of the students actually have colour preference to the choice of their clothing. This finding was supported by the work of Hanafya and Sanad (2015) on colour preferences according to educational background opined that blue was ranked as most preferred colour for clothing. The work of Dehviri, Maddahi, Afsari and Hosseini (2023) indicated that there is a significant relationship between colour preference and colour effect only in some colours. As the case in this study, the choice of blue colour for clothing has significant relationship with the effect of blue. Shariff (2023) posits that, there is psychology behind the choosing of colours for clothes, he argued that colour of cloths affect the mood and evoke emotion. The author added that, bright colours such as yellow and orange makes us feel energetic and optimistic, while colours such as blues and greens bring out calmness.

Table 3. Colour preference Chart

S/N	NAMES OF COLOUR	COLOUR PREFERENCES
1.	BLUE	
2.	WHITE	
3.	LEMON-GREEN	
4.	BIEGE	

5.	GREEN	
6.	INDIGO	
7.	BLACK	
8.	GREY	
9.	RED	
10.	PINK	
11,	CYAN	
12.	PURPLE	
13.	SKY-BLUE	
14.	ORANGE	
15.	WINE	
16.	BROWN	
17.	YELLOW	
18.	MAGENTA	
19	OLIVE-GREEN	

20	LILAC	
21.	TANGERINE	

RECOMMENDATIONS:

- **Cross-Cultural Validation:** Validate cultural influences by conducting cross-cultural comparisons to ensure the findings are not culture-specific. Include a broader range of cultures and ethnicities in the study to enhance the generalizability of results.
- **Long-Term Follow-up:** Extend longitudinal studies to allow for long-term follow-ups and observe how colour preferences evolve over an extended period. This will provide a more comprehensive understanding of the dynamics of fashion trends.
- **Neuroscientific Approaches:** Integrate neuroscientific approaches to understand the neural responses to different colours. Utilize brain imaging techniques to explore the neurological basis of emotional and psychological reactions to specific colours.
- **Incorporate Virtual Reality (VR):** Explore the use of virtual reality to simulate real-world scenarios and observe participant reactions to different coloured environments and clothing items. This immersive approach can enhance the ecological validity of experimental designs.
- **Collaboration with Fashion Technology:** Collaborate with experts in fashion technology to explore innovative ways to incorporate colour-changing fabrics or smart textiles. Investigate how technology-infused fabrics impact colour preferences and emotional responses in fashion.
- **Expand Gender Studies:** Broaden the scope of gender-based studies by considering non-binary and gender-fluid perspectives. Examine how evolving societal views on gender impact colour preferences in clothing beyond traditional stereotypes.
- **Integration of Artificial Intelligence:** Explore the integration of artificial intelligence algorithms to analyze vast amounts of social media data and predict emerging colour trends. This can enhance the predictive accuracy of the study.
- **Consumer-Brand Engagement:** Investigate the reciprocal relationship between consumers and fashion brands regarding colour preferences. Explore how brands respond to and shape consumer preferences through marketing strategies and product offerings.
- **Include Sustainable Fashion Practices:** Examine the influence of sustainability on colour choices in fashion. Investigate how eco-friendly practices and ethical considerations impact consumer preferences for certain colours and materials.
- **Age-Specific Studies:** Conduct age-specific studies to understand how colour preferences evolve across different life stages. Explore the impact of generational shifts on fashion colour trends.
- **Multidisciplinary Collaboration:** Foster collaboration with psychologists, neuroscientists, sociologists, and technology experts to bring diverse perspectives to the research. This interdisciplinary approach can enrich the study and provide a more holistic understanding.
- **Educational Outreach:** Develop educational programs and resources based on the research findings to raise awareness about the psychological impact of colour in fashion. Target fashion design schools, industry professionals, and the general public.
- **Continuous Industry Engagement:** Maintain on-going engagement with the fashion industry to ensure the research remains relevant. Regularly colour update findings to inform industry practices and contribute to the evolution of colour trends in fashion.

V. CONCLUSION

The need to cater for students in all ramification is a dutiful call by all. It must be mentioned that, money, food, payment of school fees and buying of text books may not be enough to satisfy student’s desire toward optimum performance, while neglecting the role of clothing, even as it is part of basic need. The role of colour in choice of garment selection will contribute tremendously in putting students clothing to finality of comfort as they

would now be aware of psychology status of chosen suitable colour that engender total acceptability in to academic social circle. While colour can influence and evoke different moods, feelings and emotions how we feel, these effects are subject to personal, cultural, and situational factors. As this topic is becoming more and more popular in the field of fashion, hence, more scientific research is needed to gain a better understanding of colour psychology as an index to measure fashion comfortability.

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