

FUTURE 'NEW OLD' PERCEPTION ON COLOUR PREFERENCE OF PRODUCT DESIGN

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ABSTRACT

The growth of the older generation is estimated to be increase from 2010 to 2030 specifically in Malaysia. Particularly with the rise of this generation, consumerism aspect in product designs development will be affected in order to cater this market. Within this challenge, the product appearance is estimated to evolve according to the perception and choice of older generation in their daily lives. This research studies the consumers' perception on the product appearance that is normally used in everyday life. In this paper the emphasis is given on the colour aspect of the daily used product that has been assessed. Furthermore, the highlighted users are from aged between 45-65 years known as future 'New Old' and the research was explored through survey as an instrument. The descriptive analysis was performed to analyse the respondents' perception towards colour preferences. The findings show that warm colour is slightly importance and preferable colour in choosing a product for future 'New Old'. In addition, suggestions are made as a way forward to produce a product using the preference colours in conjunction to make the product look more attractive and essentially fit their age and follow the future trend. With the availability of this study, researchers or designers thereby can produce a quality and better product design requirement that meet the consumer needs.

Keywords: *Colour, Consumer, Perception, Product Design*

1. INTRODUCTION

Ageing population remains a global phenomenon and has changed the demographic profile of many countries. Currently, in every second two people will reach the age of 60 by 2030 and 16% of the world's population will be over 60. Thus, the proportion of the elderly is increasing and Malaysia is expected to be an ageing nation by 2035 when it reaches 15% of the population and these populations will be classified as senior citizens. Minister Datuk Seri Rohani Abdul Karim said that Malaysia's citizen would number 5.6 million by 2035 and the forecast is revealed by the statistics department. Therefore, the study was conducted on respondents aged 45-65 as by 2035, they would be aged between 65-85 years old and acknowledged as baby boomers. According to Huber & Skidmore (2003), baby boomers are known as "new old" because some of the factors and characteristics of this generation are different from other generations. Furthermore, Izyan Idris & Sudbury-Riley (2010), added that demographic transition phenomena are experienced even though the stage of the increase in older populations is still not as stunning as other developing countries. For Malaysia, coping with population of ageing can be a great challenge (Ong & Phillips, 2007). Since the rise of this generation is becoming an issue, many sectors have to take an action particularly in the consumerism aspect in product designs development to improve the well-being of the ageing. Despite the importance of this study is for understanding the aging needs and developing better product to meet the needs of older consumers. Perception to colour preference on product appearance is given priority in this study since the colour preference is important (Majid & Jamalludin, 2018). According to Westland & Shin (2015), the critical point that should be focused on colour studies is to identify the priorities colour of the product and vice versa that have the potential to affect them. In creating a good product, one of the factors that play a role is its appearance. According to Crilly, Moultrie, and Clarkson (2004), the visual appearance of products plays an important role in determining consumer response. One of the attributes that play the role is colour. The impact of colour is acknowledged

(Kauppinen-Räisänen & Luomala, 2010) and colours are also often the main component in consumer purchased decisions (Yu et al., 2017).

This paper provides a literature review on the aspects of ageing perception towards product appearance intentionally to colour attribute of the product used on a daily basis. The purpose of this paper is to see the consumers' perceptions in the context of colour on the products and their importance to better understand how they will respond to the products when they grow older. In different contexts, colours have different meanings and perceptions (Jamalludin, Md.hashim, & Zalay@zali, 2014). The emphasis given in the words 'Perception' is considered an important keyword that has become the foundation of this paper. This is because the perception of ageing on product appearance is important to study to meet the needs, ownership of products and satisfaction that will be used by this population in the future. According to William, Appiah, and Botchway (2016), perception is a process involving with selecting, organizing and interpreting the information to produce meaning. It is an individual or consumer image or impression about different products on retailer, producer and many more. According to Yu et al., (2017), the visual elements of a product, or packaging, have the potential to influence consumers' purchasing decisions as it provides an attractive method of delivering a message about the nature of the product at the point of sale. Kauppinen-Räisänen & Luomala (2010), stated that colours and designs not only works with aesthetic purpose and previous marketing research has established reveals that colours have the added functionality of which colour can attract attention (Grimes and Doole,1998) and users use colour as information based on stimuli. In addition, colour needs to be changing depending on the trend so consumer has an up to date trends which have a new appearance and personalities as it can create a new mood. However, research on colour preferences for product suggests that consumers often confirm with norms in their colour choices for certain product categories, particularly high-risk purchases. Understanding the factors that enter into consumer's colour decision may help prevent marketers and designers from wasting time and energy chasing the latest trend. A new trend has emerged in which marketers feel that it is important to update colours regularly (Triplett 1996). Hence, in realizing the above goals, this will provide a valuable support in design processes and strategies, which will reinforce marketing and design potential.

2. METHODOLOGY

The main purpose of the research was to identify the consumer perception of colour preference on product designs. A quantitative approach was used in order to elicit insight and in depth the consumer perception towards colour preferences. To achieve this studies the details of tasks were conducted as summarised in (table 1) below. In this study, a total of 378 respondents aged between 45-65 years were evaluated. The respondents represented the future 'New Old' population. The next step, questionnaire creation and distributed by Google web online survey was used to identify the consumer colour preferences based on daily used products. The questionnaire contains digital image of three daily products as a subject to evaluate which is toothbrush, washing machine and iron. The final step were to perform a colour perception using the semantic differential scale (SD) method to identify which indicator best represents a pair of bipolar terms. In this step, a bipolar term, namely: cool-warm and 7-point Likert Scale (extremely cool-extremely warm) were used. Data received were analysed using conventional descriptive statistics quantifying the frequency and percentage.

Table 1: Method to identify future 'New Old' on colour preference

Stage 1		
Purpose	To identify Future 'New Old Perception on Colour preference	
Subjects	Age 45-65	378 Respondents
Material	Survey	Questionnaire
Analytical Tool	Descriptive analysis	Semantic differential Scale (SD) Likert scale 1 Extremely Cool - 7 Extremely Warm



3. RESULT AND DISCUSSION




As mention in the methodology section, these sections contain two sections and below are the results. For demographic section, the respondents need to fill their personal details such as age, gender and academic level. A short questionnaire for section two is three different products to be evaluated namely 1) toothbrush, 2) washing machine and 3) iron. Using a 7-point likert scale respondents was asked to choose their preferable colour either cool or warm colour from extremely, slightly, quite and neither cool nor warm and extremely, slightly, quite warm colour based on the products given.

Table 2 below shows a total of 378 respondents (male = 168 and female = 210) between the ages 45-65 and academic level between degree-PhD participated in web-based survey (online). The survey commenced by asking their perception of colour preference between cool-warm. The main questionnaire consisted of two sections covering demographic profile; age, gender, academic level (section1) and indicating their colour preferences (section 2). All respondents are academicians from local Universities in northern part of Malaysia.

Table 2: Demographic results

		Frequency	Percentage (%)
Age	45-50	183	48.0
	51-56	126	33.0
	57-65	64	17.0
	Other	5	2.0
Gender	Male	168	44.4
	Female	210	55.6
Academic Level	Degree	24	6.00
	Master	199	52.0
	Ph.D	161	42.0

Table 3: Frequency and Percentage results for colour preferences based on extremely cool-extremely warm

Bipolar terms	Cool						Warm							
	Extremely 1	Slightly 2	Quite 3	neither 4	Quite 5	Slightly 6	Extremely 7							
Indicator 7-point likert scale	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent		
	7	1.9%	14	3.7%	44	11.6%	94	24.9	112	29.6	75	19.8%	32	8.5%
	0	0%	12	32%	39	10.3%	63	16.7%	88	23.3%	123	32.5%	53	14%
	20	5.2%	68	18%	46	12%	78	20.7%	72	19.1%	63	16.7%	31	8.2%

Referring to table 3 above, the results showing the frequency and percentage of three different products evaluated. Based on the results, all three products received a positive response from the respondents. For toothbrush, 29.6% preferred quiet warm colour, 17.2% in total choose cool colour and 24.9% of the respondents choose neither cool nor warm colour. For second product, it seems that 32.5% prefer slightly warm and 32% prefer cool colour for washing machine and the results seems balance. However, 23.3% of the respondents choose quite warm still showing that the majority tend to prefer warm. In respond to third product i.e iron, the results indicate that 20.7% of the respondents choose neither cool nor warm colour. Meanwhile, 19.1% prefer quite warm and 16.7% prefer slightly warm colour. However, 18% think quite cool colour is better for iron. Overall, these results indicate that majority of the respondents tend to prefer a warm colour.

This colour perception study contributes to the understanding of the importance that is communicated on daily product. The results show that the warm colour produces positive expectation while cool colour is perceived more negatively. Moreover, there is an opinion that the meaning of the colour is related to emotion. Olguntürk, (2015), states that red-hot colours illustrate powerful, energy, anger and sometimes sadness instead of green depicting nature, comfort, peaceful and relaxation (blue). However, meaning of the colours depends on the context (Won & Westland, 2017). The warm colour selection on this study is an interesting and surprising decision, where this decision shows that the future of the 'New Old' population preferring warm colours on the daily product assessed or products that in the same category.

4. CONCLUSION

Colours have the potential to influence the overall perception of consumer about the appearance of the product and can persuade their purchasing decisions (Akçay, Sable, & Dalgin, 2012). In the market, colours are an important tool to market many products as consumers will often choose products purchased when they are presented with expected colour and with the preferential choice of colour that can satisfy tastes and needs. However, individual perceptions of colours preferences are different and become very subjective and are therefore difficult to predict (Jamalludin, Md.hashim, & Zalay@zali, 2014). Hence, the

importance of recognising or understanding the future 'New Old' perception of colour is a necessity since these factors can affect them in purchasing or selecting products in the future. Further study needs to be carried out suggested on different type of daily use product since the researcher found that there are still much more works are required in this field. With existing and ongoing research, the benefits gained can be realized. Findings and suggestions are made so that designers can pay extra attention on choosing the appropriate colour in product as they design for future 'New Old' population so that will meet and fulfil their needs.

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