# Quan Huynh PSYCHOLOGY OF COLOUR IN CUSTOMER BUYING BEHAVIOUR 

Kitchen equipment and tools in Finland

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#### Abstract

Author: Quan Huynh Title: Psychology of colour in customer buying behaviour: Kitchen equipment and tools in Finland. Year: 2019 Language: English Pages: 56 pages +13 appendices Name of Supervisor: Rosmeriany Nahan-Suomela Colour has always been an interesting feature in all aspects of life. With the noticed increasing trend of creative design in kitchen equipment and tools, it seems that manufacturers have been striving to attract customers to their products by means of colour. Hence, studies on consumer buying behaviour is crucial to, with colour, not only attract buyers' attention but also to persuade them to purchase.

The thesis' goal is to study the relationship between the psychology of colour and customer buying behaviour, specifically towards purchasing kitchen equipment in Finland. The study was carried to answer the three core questions regarding the human perception of colour, colour meaning interpretation and the effects of colour on customer buying behaviour.

The theoretical framework discusses the knowledge of psychology of colour and consumer buyer decision process. Continuing by the empirical framework, in which the research methodology and result analysis are discussed.

The outcome suggests that as an attracting element, bright colours function better but neutral colours and dark colours are more persuasive to purchase from the buyers' perspective. However, as colour perception is psychological and the fact that there are people with colour deficiency, it is difficult to draw up assumptions based on the small size sample. Further research on this topic is recommended due to the competitive market for creative designs.


Keywords Psychology of colour, customer buying behaviour, kitchen equipment and tools.

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## 1. INTRODUCTION

### 1.1 Background of the research

Nowadays, creativity in product design and package design has become more and more important because of the increasing competition in every industry presenting in Finland, kitchen equipment and tools industry is not exclusive. However, it is not just simply use any colours on the design, companies need to know which colour represents their brands, attracts their target customers and, at the same time, enables the communication between them and their customers. Therefore, it is necessary to explore the customers' perception of colours and find out its connection with the customers' buying behaviour. In order to do that, the objective of this research was defined.

### 1.2 Objective of the research

It has always been acknowledged that different colour affects differently to the human's mood and action. Also, colours are perceived differently by people with different living backgrounds. Therefore, the main objective of this research paper is to find out the connection between the product appearance colour, including the product itself and its package, and customer buying behaviour in Finland, especially towards kitchen equipment and tools. To achieve this goal, the research needs to answer three research questions

### 1.3 Research questions

In order to reach the objective of the research, there are three research questions that need to be answered:

- In a general perspective, how do customers understand colours?
- Based on what factors does the perceiver interpret the meaning colours?
- Does colour perception have any relations to customer buying behaviour in the market of kitchenware in Finland?


### 1.4 Research methodology

The theoretical framework is based on many researches relating to the psychology of colours and customer buying behaviour. For each theory, one theory book is used to be the main source. In detail, "Marketing concepts and strategies" of Dibb, S., Simkin L., Pride, W.M. \& Ferrell O.C is the base for the customer buying behaviour theory; and "Colours as non-verbal signs on packages" of Kauppinen, H. is the base for the psychology of colour theory.

Regarding the empirical framework, firstly, the aim of the questionnaire is to solve the research questions with the help of the theoretical framework. Questions concern mostly customer buying behaviour and colour perception. The expected outcome is to understand the relation between these two aspects and to find out whether this outcome can be utilized for businesses to gain profitability. Concerning the questions about colour perception, there are questions that aim to examine the general colour associations which are mentioned in the theoretical framework. Within the data analysis, the research combines responses of different questions to find out new aspects of the discussed topic.

### 1.5 Structure of the research

After the first chapter of introduction to the research, the theoretical framework will be discussed. The theoretical framework starts with the theory of psychology of colour, which mentions the definition of colours, functions of colours and theirs meaning.

The second part of the theoretical framework will discuss the theory of customer buying behaviour including the definition, the decision-making process and influential factors.

Following with the theoretical framework is the empirical framework, which will discuss the research methodology and the result analysis. The research paper ends with a conclusion summarising the result of the whole research and suggestions for future researches on this topic.

## 2. THEORETICAL FRAMEWORK

### 2.1 Psychology of colour

Colour appears everywhere if there is light and plays a significant role in different aspects of life. Mohebbi (2014) mentions that 62-90 percent of evaluation is based exclusively on colours. Also, according to Kauppinen (2004), regarding the research area, colour is used in five main areas, namely chemistry, physiology, physics, aesthetic and finally, psychology. It is also mentioned in her book published in 2004, that regarding psychological factors, "colour is ... a perception in the mind to a psychologist". Additionally, understanding how people perceive colours could probably help creating an efficient product appearance design.

### 2.1.1 Definition and terms

Within colours, there are three properties; these properties can also have many synonyms. The first property is hue, which describes the colour pigment. Moreover, there are two levels of hues: the primary level includes yellow, red and blue; the secondary level includes the combination of two nearby primary hues in the colour wheel (Figure 1). Also, the mixture of primary colours with white and/or black can be called as secondary hues.


Figure 1. Colour wheel (Kauppinen H. 2004, 40).

In addition to be defined as secondary hues, the mixture of primary colours with white and/or black is called as value or brightness. In another words, the concept of value can be understood as the level of lightness or darkness. The last property of colour is chroma, also named saturation. This term describes "the amount of pigment in the hue" (Kauppinen, 2004). (Kauppinen H. 2004, 40-41)

To conclude, there could be an eternity number of colours which can be created by changing the degree of each property of the colour.

### 2.1.2 Functions of colours

Colours are utilized for a diversity of purposes by the subject. For example, in the world of animals, colours can be used to camouflage or hide the subject away from threats; and in the world of human, the functions of colours become more complex and diverse.

In the healthcare industry, Egyptian doctors from the ancient time used colours as a treatment to health problems. This illness treatment system is influential to heartbeat, blood pressure and perspiration. (Singh, 2006)

In restaurant industry, a combination of red and yellow is often used in fast-food restaurants because the red colour affects our metabolism and the yellow colour grabs customers' attention, raise their appetite and urge them to eat. On another hand, a la carte restaurants usually use the blue colour for a calm atmosphere, so that the customers would spend longer time per visit, which leads to ordering more food. (Singh, 2006)

In casinos, red colour lighting is used to influence the customer's perception of time, because under a red light, a person perceives time as being slower than it really is. (Singh, 2006)

Colours, as an element of a package, can attract customers in the shop as well as possibly prolong their attention time, which enables the communication process. (Kauppinen-Räisänen \& Luomala, 2010)

It is claimed by the traditional psychologists that colours do not have any influence on the human personality. However, colour test is used by psychiatrist jointly with other examines to determine personalities. (Singh, 2006)

Although colours possess many influential functions, yet, the target industry of this research is a manufacturing industry. In the manufacturing industry, to sell the product to the consumer, the product needs to, firstly attract the customer, then deliver the message from the manufacturer to the customer. Therefore, among the mentioned usage of colours in different industries, because the research targets the kitchen equipment and tools industry, only two functions of colours will be discussed in the following parts, which are an attention-grabber and a communication tool.

## Colours in drawing attention

In business, colour could be used as a tool to draw attention. There are various purposes for the gained attention. Regarding product development strategies, the purpose would be to make a product stand out from its rivals and to persuade the targeted customers to buy the product.

This function could be supported by a statement by Kauppinen (2004) that colour is the first visual datum that consumers notice when looking at a product. Therefore, choosing the correct colour to make an attractive first impression is considerably important.

The drawn attention could be categorised into two categories (Kauppinen, 2004). The first category is voluntary attention, which means consumers use colours with intentions, for example to spot a specific brand or indicate the quality of products (Kauppinen, 2004). This could be resulted from the consumers' shopping experience. Descriptively, when a product earns a high level of customer satisfaction and
to the degree that makes consumers want to re-purchase, the colours of the product would be memorized. Hence, the consumers would use the specific colours to spot the preferred products in a store.

The second type of attraction is involuntary. There are two circumstances in this attraction category. Firstly, it is the impression happening after the voluntary attention. In other words, a consumer is subconsciously attracted to a product of such colour when the voluntary attraction has happened for an undefined period. The second circumstance is when a consumer is drawn attention to a product without an advance purchasing plan. This attraction could be drawn by products having different colours from the planned products within a same product class. (Kauppinen 2004, 42)

For instance, at the dining textile section in a supermarket, products are usually displayed in accordance to their functions. Under this circumstance, the voluntary attention would be used to spot the desired product. After a period of being attracted to the product voluntarily, the consumer would probably be subconsciously attracted to the product. Additionally, in some supermarkets, there might be a special displaying area, where products relating to a current theme would be exhibited. These kinds of shelves most of the time visually out-stand the surrounding shelves. This is the time when involuntary attention is drawn.

Additionally, some products could be placed altogether with a totally different product line, if they could be related in some respects other than characteristics or functions. The involuntary attention might also be drawn by this method of shelf management.

According to Kauppinen’s research (2004) of past studies, the function of drawing attention of colour might relate to the colour properties. It could be stated that warm colours are better at triggering stimulating emotions in customers, such as hunger, than cool colours. This could explain why yellow and red are often seen in restaurants.

Once the attention is drawn, the product would start to communicate with the attracted buyer by its colours.

## Colours as a communication tool

Kauppinen states in her book that "colours communicate by creating meanings about the product itself" (2014). This statement could be supported in the situation of perishable products such as fruit when the colour indicates the freshness of the fruit. However, it could also be said that colours communicate with the consumers by reminiscing the meaning and the experience with the colour in the consumers’ mind. Because personal life experience varies among people, hence, a colour might be perceived as positive to one person but as negative or neutral to another one. For example, in the context of dining textile, a white table cover could be perceived as elegant to one while as easy-to-get-dirty to another. The perceived meaning might be related to the background of the consumer and the industry context.

### 2.1.3 Meaning of colours

As previously mentioned, colours are controversial because they are understood differently based on the perceiver's life experience. In business, the meaning also depends on the product class. For example, when looking at fruits, the customer is receiving the status of the fruit about its freshness, its taste and so on.

Colours are also understood differently depending on religious and cultures. For example, from the view of Hinduism in India, orange is considered to be the most sacred colour, but, in Zambia, the Ndembo does not consider orange as a colour. On another hand, among most of the religious, since 2300 BC, black has always been associated with a negative meaning. (Singh, 2006; Hynes, 2009)

Moreover, it is questionable whether colours might also have universal meaning, i.e. almost everyone in the world perceive as the same meaning.

## Colour association \& preferences

Colour association means that one colour is associated with a specific meaning. Besides, colour preference define the individual likings or an agreed liking of a group.

A cross-cultural study on colour association and preference was conducted on subjects from Japan, People’s Republic of China, South Korea and United States of America. It was found from the study that there are similar and dissimilar associations. (Madden, Hewett \& Roth, 2000)

In the book of Kauppinen (2004), there have been many other researches on the topic of psychology of colour, mostly on colour associations and preferences. However, most of these researches conflict each other. The reasons for that are due to the lack of common language, the unawareness of context and the lack of practical proof. Another reason for earlier researches became conflicting could be that the three properties, namely hue, value and chroma, were not considered. (Crozier, 1999)

## General meaning of colours

In order to generalise the possibility of colours to have universal meanings, some examples would be given based on the research of Eiseman (2006). L. Eiseman has been the executive director of the Pantone Color Institute since 1985, according to Leatrice Eiseman’s LinkedIn profile.

Due to the eternal variety of colours, this section would discuss only the possible universal meaning of primary hues, which are red, yellow and blue, and the neutral colours, which are black and white.

First of all, the colour that is probably the most capable one to arise stimulating feelings in human is red. Red could be perceived as anything relating to blood. As Eiseman (2006) claims that, "It is the color of life-sustaining blood or life-threatening bloodshed as well as the color of enticing, appetite arousing ripened fruits and
delicious foods that sustain human's very existence." Besides that, red could also understood as the sexy colour in the industries relating to beauty, such as lipsticks. Second colour of the primary hues is yellow. According to Eiseman (2006), yellow is the colour of the sun, positive energy and enlightenment. This colour is also claimed to be attractive to infants. Moreover, yellow could also be an attentiongetter. Not only can yellow be attractive on its own but also is when it combined with black to be a "WATCH OUT" warning. The last primary hue is blue. Blue has been associated with a cloudless sky, peace and clearness. Religiously, blue relates to devoutness and commitment. In business, companies in several industries use the blue colour to symbolise stability, quality and accomplishment. However, the challenge is to keep the blue identification to be fresh. (Eiseman 2006)

Coming to the neutral colours, these colours could be applied on their own or combined with others easily. White has always been the colour of purity and pristine. Naturally, white is associated with snow or white clouds. The word "white" could sometimes be combined with other words and this combination might slightly change the meaning of the word when there is no combination with the word "white". For instance, "white lie", according to the Cambridge Dictionary, is "a lie that is told in order to be polite or to stop someone from being upset by the truth". On the other hand, black could generally be associated with the death. However, in some industries, for example, fashion or car industry, black could mean luxury, modernity and power. When black and white are combined, it could represent the essence of life as the yin-and-yang symbol; it could also mean the utmost truthfulness. (Eiseman, 2006)

Precisely speaking, one colour could have various meaning depending on the perceiver, hence, it is challenging to conclude that some colours could have universal meaning. However, to a general extent, the mentioned meaning could be applicable.

### 2.1.4 Colour trend

Since colour trends alter seasonally or occasionally, it is crucial for manufacturers to be informed of the coming trend. Upcoming colour palettes could be accomplished either based on manufacturers’ internal data or based on the forecasted standards by colour standard companies, for example Pantone Color Institute from the United States of America and RAL Colours from Germany. As defined on BusinessDictionary.com, colour matching system is a process of illustrating colours for a print work by means of matching a book of swatches with the commercial inks.

However, the applicability of one trendy colour might vary among different industries. According to the list of 8 trendy colours in 2018 of 99designs.com, metallic palette has become classical to interior and fashion industries, yet it has not become commonly utilized in visual graphic design industry.

### 2.1.5 Summary

To summarise, there is an eternity number of colours that can be created by changing the three colour properties and these colours have diverse influences, both physiological and psychological, on human. Besides, colour is the first visual datum that people receive when looking at an object, hence, the first impression includes colours. Therefore, it is possible that with the correct colours, the products could affect the customer buying behaviour. In order to find out which ways colours could affect this behaviour, the theoretical framework continues with a literature review on customer buyer decision process.

### 2.2 Customer buyer decision process

Consumer buying behaviour has been known as an important factor that companies should understand. Customer buying behaviour is defined as a comprehensive conclusion of customers towards purchasing (Muhammad Khalil, Alamzab \& Muhammad 2018). Depending on the needs and wants of each consumer that behaviour appears differently. Additionally, Rajkumar \& Mridula claim that customers do not behave in a same manner among different product classes. By recognizing and understanding how the ultimate customer behaves, companies can imply suitable plans and strategies to reach the set goals and might also influence their consumers’ buying behaviour.

There are four types of consumer buying behaviour: routine response behaviour, limited decision-making, extensive decision-making and variations in decisionmaking behaviour. Routine response behaviour indicates the high purchase frequency of low-risk, inexpensive products from familiar brands with small efforts in seeking information. Limited decision-making is the next level which has lower purchase frequency and brand familiarity yet higher efforts in information obtaining. Thirdly, extensive decision-making involves expensive, high-risk and unfamiliar product class with more time seeking information. This behaviour relates also to impulse buying. Impulse buying happens when the consumer has the need to buy the product immediately without any previous planning. The last behaviour is a behavioural circle of the mentioned three behaviours. There can be many reasons that affect the consumer when they change from routine response behaviour to extensive decision-making, e.g. the previous product is no longer efficient. (Dibb, Simkin, Pride \& Ferrell 2017, 142-143).

Chronologically, the level of purchase frequency and brand familiarity decreases while the price, risk level and efforts of obtaining information increases. Buying behaviours are constructed throughout a process which is called Consumer buying decision process.

### 2.2.1 Stages of buying decision process

This process includes five steps: problem recognition, information search, evaluation of alternatives, purchase and post-purchase evaluation (Dibb \& et al. 2017, 143)

The first stage happens when a person is aware of his needs to fill the gap between the desired state and the current situation. Needs are categorised by a hierarchy formulated by Abraham Maslow with physiological needs at the bottom and selffulfilment needs at the top. Other needs are, chronologically towards the top, needs of safety can security, social needs, and need of recognition. The speed of getting awareness varies among individuals and based on how the need acknowledgement was initiated. (Dibb \& et al. 2017, 144; Svatošová 2013)

Having the problem recognized, the customer will continue to find more information to solve the problem. The information can be obtained from internal and external search. At the end of this stage, if the consumer would have a group of preferred brands, which is called "an evoked set", these brands would be evaluated to choose the most favourite one. (Dibb \& et al. 2017, 145-146).

The next stage starts with an established set of criteria in order to rank the alternatives in the evoked set. Criteria would possibly concern characteristics and features, either preferred or not preferred, of the product class. Additionally, the level of salience could be different in each criterion. After the evaluation, the evoked set is narrowed down to one or more brands, which means the consumer would proceed to the next stage: purchase (Dibb \& et al. 2017, 146).

After purchasing, the product will be evaluated based on most of the criteria set in "Evaluation of alternatives" stage. Also, this stage indicates the customer satisfaction level, which means whether the product functions in the desired way can influence the consumer's future buying behaviour. Specifically, if the consumer is disappointed, a complaint might be filed; or if the product reaches the satisfactory level, a purchase could be made in the future, and the consumer might communicate
to possible buyers, which is also known as word-of-mouth. (Dibb \& et al. 2017, 147)

To conclude, the buying decision process varies among consumers, therefore consumers might stop the process at any stage before the Purchase stage, as mentioned by Dibb \& et al. (2017). Figure 2 summarises the customer decision making process according to Svatosova (2013).

Regarding Figure 2, the figure was created and used in a study on online customer buying behaviour. However, offline customer buying behaviour is concerned in this thesis. Therefore, instead of online circumstances, input for offline circumstances could be physical stores, available to access, communication channels and products are available on-site or online. Also, in offline circumstances, at the information processing stage, customers would raise questions about whether products can be acquired online or not.


Figure 2. Customer buying process. (Svatosova, 2013)

### 2.2.2 Psychological factors affecting BDP

According to Dibb \& et al. (2017), psychological factors category has a partial influence on the consumer buying behaviour thus on the buying decision process. This category includes perception, motives, learning, attitudes, and personality, which are discussed in the coming sections.

## Perception

Perception varies among individuals and it comprises of three steps before the consumer could reach the stage of producing meaning of the received information. (Dibb \& et al. 2017, 150-151)

The first step is the information selection. Information is inputted through the human's sensations. However, the input is filtered to be stored in the consumer's memory only if it is related to their concerns or if it has changed notably. The critical characteristics of perceptual results in two conditions: selective distortion and selective retention. Selective distortion is defined as that the input contrasts the receiver's feelings or beliefs while selective retention describes an input endorsing the receiver's feelings or beliefs. Secondly, when new information is received, it is combined and being organized with existing information. After that, the information is interpreted based on the receiver's existed knowledge. In addition to information input through sensations, consumers tend to purchase products which are believed to express or boost their self-images. (Dibb \& et al. 2017, 151-152)

The myth of Black Friday may be a good illustration for this theory. According to Jane B.T. and Peters C. $(2011,522)$, in 1965, traffic polices called a day, when there was a large number of shoppers and heavy traffic, as Black Friday. Nowadays, Black Friday is the time when many retail stores of most product classes giving out huge discounts. This event happens a day after Thanksgiving every year, hence, it has become a tradition in almost every country that people go out to shop on that day. The reason why there are always a lot of shoppers on Black Friday is that people think the discounts are real. Written in a 160 -year-old online magazine named The Atlantic, the believed-to-be discounted price actually slightly equals the normal price of the product. In other words, shoppers may have been perceiving Black Friday is a money-saving shopping day, hence, they are more likely to shop in a large amount on this day than usual. Also, some Black-Friday shoppers would feel boosted for having got a good deal.

Moreover, humans are accustomed to the perception that if the crowd is doing it, it must be the right thing to do. This perception is stated in an online article by Henderson R. (2017), a PhD scholar at the University of Cambridge posted on PsychologyToday.com, that human learns by observing what the surrounding people are doing, and that is called social proof. Therefore, when there would be a crowd buying a specific product class, consumers would probably follow the trend.

Generally, understanding the basic perception of the target consumer group, marketers can figure out what is the most efficient marketing strategy to implement.

## Motivation

Motives, i.e. motivation, are internal forces driving consumers towards decisions which fulfil their needs or achieve their goals. There is usually a set of motives and one can be more prioritized than the others in the set. It is stated that motives have a significant effect on the direction and extremity of consumer behaviour. Additionally, when a consumer is about to make a purchase at a specific store on a regular basis, the person has developed his patronage motives which are based mostly on the quality and the satisfaction level towards services or products related factors. (Dibb \& et al. 2017, 152-153)

The definition of needs and wants mentioned earlier might be relevant to the motive of consumers. The motive of fulfilling the needs would sometimes be stronger than fulfilling the wants due to the survival instinct of a human nature. However, if the consumer perception is affected strongly by external factors, e.g. fashion trend, he would probably reduce his expense on his needs to pay more for his wants.

Last but not least, motive differs among individuals culturally, which means that an international best-seller product could be purchased for different reasons. (Thøgersen, Marcia Dutra, Marcelo \& Zhou 2015)

## Learning

Learning is an act of changing behaviours due to owned information and experience. Results of existed behaviours impact significantly to the learning process (Dibb \& et al. 2017, 153-154). If one behaviour would have led to a problem, a person who is flexible would spend less time to change behaviour.

The capability of information processing is different for each person. This capability is strongly influenced by knowledge of the familiarity with the product as well
as the expertise to use the product. A person with more expertise in a specific product class would know the decisive detail of a qualified product and that person is more willing to spend time searching for their desired products in a wider range of information. (Dibb \& et al. 2017, 154-155)

This factor also relates to a psychological state called the comfort zone. It is defined as "a situation in which you feel comfortable and in which your ability and determination are not being tested" by the Cambridge Dictionary of Cambridge University Press. Take an example of a person adopting a zero-waste lifestyle because he recognizes the environmental threat of non-recyclable plastic products. His comfort zone was using plastic products without recycling. By changing his lifestyle, he is changing his behaviours in the shopping routine. The shopping list would include more free-plastic products and he will start to search for information regarding a zero-waste lifestyle. As a result, his preferences for product classes will change in accordance with his learning process. However, when a person is expanding his comfort zone, the stress and anxiety level would increase. At this point, people might change their mind and return to their previous comfort zone.

Therefore, companies implementing a marketing strategy, which teaches their consumers new knowledge, might receive a satisfactory response at the early stage; over the time, when some consumers start to feel uncomfortable with the new knowledge, i.e. return to their previous comfort zone, the company would suffer if there are no better solutions coming. To tackle this, marketing strategies are recommended to be consistent and the given knowledge should be meaningful to the target consumers.

## Attitudes

Attitudes could be considered as "a direct determinants" of customer buying behaviour (Svatosová, 2013). Attitudes can be simply understood as the critical and emotional opinions and the behavioural intention towards a specific product. An attitude is gained through interaction with the surrounding environment and personal experience. Depending on the circumstance, one attitude would be expressed more
clearly than the others. There are three components: cognitive, affective and behavioural; in which if changes in one could or could not change the others. (Dibb \& et al. 2017, 155)

Usually, attitude is hard to be changed if it is aggressive towards a specific topic, for example, politics and religion. On another hand, that depends on the personality, whether they are open to the difference or not, which will be discussed on the next part.

## Personality

Internal traits and behaviours are expressed as personality. In most cases, personality is native or arises from personal experience. According to Gangai \& Agrawal (2016), personality traits factor is one of the most significant determinants whether the purchase is going to be impulsive or not. Additionally, human behaviour is impacted mainly by primary drives including "emotional, interpersonal and attitudinal processes" originating from the inside of each person. (Dibbs \& et al. 2017, 157; Gangai \& Agrawal 2016; Fayez \& Labib 2016)

In addition to these psychological factors, the consumer buying decision process gets affected by the surrounding social factors, which will be discussed in the next part.

### 2.2.3 Social factors affecting BDP

According to Dibb \& et al. (2017), four majors categorises are prised in social factors: roles and family, reference group, social class and culture.

## Roles and family

First to mention is roles and family, every individual has their roles to perform depending on their expectations and the surrounding people. These roles might lead to having various sets of prospects. Roles of a person could influence their overall behaviour and buying behaviour. Additionally, their buying behaviour also gets influenced by opinions of the surroundings as well as their family roles (Dibb \& et al.

2017, 157-158). For example, when parents walking into the toy section of the supermarket with their kids. The kids might be able to convince the parents to buy their three favourite toys by consistent requests or meltdown. This case can result in two endings. Firstly, the kids would succeed because the parents could not disagree or resist. Secondly, the parents let the kids choose only one as the most preferred option and make the purchase. This situation might explain the influence of the kids' opinions on their parents' choice of purchased products in some childrenfriendly sections.

## Reference groups

The second category is reference groups. These group could affect the person either negatively or positively, but in this research paper, only the positive aspect is concerned. Reference groups is defined as a group in which group members are influenced strongly by the fellows’ opinions. Reference groups are utilized as a source of information or comparison standards. To what degree the reference group can affect a specific person depends on how responsive the person towards their reference group. Within a reference group, the person, who is considered as informative and responsible to remain informed, is called an opinion leader. The surrounding society could also be seen as a reference group. The type of society would affect the level of social anticipation on personal advancement. Western societies, socalled individualistic, highlight independent affairs, individual objectives, freedom; while Eastern societies, so-called collectivistic, stress on mutually dependent affairs, common targets, solidity and society collaboration. It is claimed in a research of an emerging market that the necessity of conformity to social values and moral standards of an individual is bespoken through one's purchase decision. (Dibb \& et al. 2017, 158-159; Lee, Beckert \& Goodrich 2010; Khare 2015)

## Social class

Moreover, social class considers people that have the same social rank. This class is an open group, which means that people can join and exit at any time. The criteria for different classes vary in different societies. People belonging in a same social
class tend to have similar acting patterns. This factor affects many aspects of a chosen product as well as the classes’ shopping behaviours. Usually, it is associated higher income level with higher social class, however, there are still many other traits of social class: ethics and way of life. (Dibb \& et al. 2017, 159; Mihic \& Culina 2006)

## Culture

Last but not least, culture is everything created by humans, including tangible and intangible subjects. It is the acceptable values and behaviours in a society. Hence, this affects the way consumers purchase and use products as well as how they get satisfied. Besides culture, humans also develop sub-cultures, which are their origins or personalities. There are several sub-cultures coming from a variety of ethnicities, and people from one ethnicity tend to have similar behaviours or attitude. (Dibb \& et al. 2017, 159)

### 2.2.4 Summary

Briefly, there are four types of buying behaviour and a customer might change her behaviour type in accordance with her purchase experience and influential factors. During a purchase experience, a customer decides the purchase through a process including of five steps. This process starts when the person is acknowledged of the needs of acquirement and ends with post-purchase evaluation. However, this process could also stop at any stage before reaching the purchase step. There are many factors affecting this process, two from which were discussed: psychological factors and social factors. Due to the fact that psychological factors and social factors are diverse, buying behaviour varies among countries, cultures and individuals.

### 2.3 Summary of theoretical framework

Colour exists as long as there is light, and they consist of three properties which can be altered to create a new colour. Colour is capable of affecting human moods and actions, grabbing attention and conversing messages. Observer elaborates the meaning colours based on their experience connecting with that colours. In addition to the personal connection, the observer's perception could be influenced by the surrounding society, culture or religion. However, in the business circumstance, one specific colour could function well for one industry but that does not mean it can be applied on other industries. Application of colour in product needs to be planned based on the target customer, industry standard and other customer-related issues.

Continuingly, regarding customer buying behaviour, there are four types of behaviour with a five-step decision-making process. Depending on the type of behaviour that the extension of the process differs. As mentioned that there are many external and internal factors influencing the decision-making process. These internal factors could be categorised as psychological factors, and external factors as social factors.

By understanding how people perceive colours and understand their meanings, product designers could know how to create and improve their work. Because this research is to explore the customers' perception of colours, an empirical framework was conducted and reported in the next chapter.

## 3. EMPIRICAL FRAMEWORK

### 3.1 Research method

There are three research methodology that are commonly used: qualitative methodology, quantitative methodology and mixed methodology. It is stated in a study on marketing research methodology by Murshed and Zhang (2016) that based on a social psychology study, researchers with analytic thinking are more likely to apply quantitative methodology and that, holistic-thinking researchers are more likely to choose qualitative methodology.

Qualitative methodology is more contextual. This methodology embodies "relativism, constructionism and subjectivism" (Murshed \& Zhang, 2016). It is applied to explore a thorough understanding of a scenery and direct interaction. Data collected from this methodology are usually from interviews.

Quantitative methodology combines various scientific methods that enables the researcher to explore and explain the research topic statistically. Data can be collected through computational or statistical methods. Quantitative methodology stresses "objectivity, generalizability and reliability" (Murshed \& Zhang, 2016).

Because of the goal of this thesis is to understand the given topic from the consumers' point of view as well as to check the theory of general colour associations, the main research methodology for the empirical study is the quantitative research. Sending out questionnaire is the chosen method to collect data.

### 3.1.1 Objectives of questionnaire

The questionnaire is constructed for the researcher to answer the research questions, which are mentioned in the introduction of this research paper, based on the collected data with the support of the theoretical framework. Moreover, the researcher would like to understand the creditability level of general meaning of colours mentioned previously in the theory of psychology of colour.

### 3.1.2 Questionnaire construction

The questionnaire includes 34 questions concerning the research topic, which are sorted into six parts. Figure 3 summarises the structure of the questionnaire and the applied questionnaire is attached as Appendix 1.

- Part I: Colour deficiency includes 1 yes/no question to identify the eligible respondents due to the limitation of the research. Respondents who answer "yes" will be directed immediately to the submission stage, e.g. they will not answer to the main questions. This question also minimises the possibility of misunderstanding and misperception.
- Part II: Background information concerns age, gender and nationality. This part includes 3 multiple-choice questions
- Part III: General buying behaviour concerns style preference, purchase frequency, purchase motive, usage frequency, list of criteria, criteria exception, opinion on colour range of such products in Finland. This part includes 4 multiple-choice questions, 1 rating question, 2 yes/no questions with one having follow-up questions.
- Part IV: The most recent purchase experience concerns product specification, usage frequency, pre-purchase criteria, attractive feature, colour's influence on buying decision. This part includes 1 text question, 2 multiplechoice question with 1 having a follow-up question, 1 rating question and 1 yes/no question.
- Part V: Colour perception and association concerns colour/colour combination preference, colour association, national flag colour resemblance, cultural colour association, application of colour preference, voluntary attention, brand recognition, opinion on given general meaning of colours/colour combinations. This part includes 2 text questions, 13 yes/no question with 2 having open-text questions
- Part VI: Trendy colour concerns likeliness of buying products with trendy colour and interest in trendy colour. This part includes 2 rating questions and 1 yes/no question


Figure 3. Questionnaire structure.

Moreover, in order to be more visually understandable and to limit the possibility of misunderstanding shades of intended colours, besides the elimination of colour deficiency respondents, pictures of the questioned colours are included in the questionnaire.

Despite a quite large number of questions, the questions are designed to be simple and easy to answer, so that the audience can answer in a reasonably short amount of time.

The questionnaire is a web-based form and is sent to audience via e-mail, hence, the respondents voluntarily fill in the form. Therefore, the collected response is creditable.

### 3.1.3 Discussed product class

The product class in question is kitchen equipment and tools. The reason for this to be chosen is originated from the interest of the researcher in kitchenware and that kitchenware industry has the possibility of growing within the era of technology advancement and valued creativeness.

### 3.1.4 Target respondent

The objective is to understand the practical aspect of the research in the Finnish market; hence, the questionnaire is sent to the students attending Vaasa University of Applied Sciences (VAMK) in Vaasa, Finland and the researcher's acquaintances residing in different regions of Finland. The acquaintances are restaurant owners, chefs, business owners, and students from other Finnish universities/ universities of applied sciences.

### 3.1.5 Reliability

Firstly, the theoretical framework is based mostly on two theory books for each theory part. These two books had been approved by the thesis supervisor beforehand. Also, theory mentioned in these two resources are from reliable authors and their research work were in the European market which would probably be eligible to apply on the Finnish market.

Secondly, regarding the empirical framework, the estimated population size is approximately 5500000 people. The recommended confidence level, which means the degree of accuracy of the sample size reflecting the population size, is $95 \%$. The recommended margin of error, which means the allowable small amount in case of changing circumstances, is $5 \%$. A sample size of 3500 people is set to aim for a margin of error of 1.68\%. According to Thornton, R. J. \& Thornton, J. A. (2004),
the "correct interpretation" of this margin of error is that if the size of 3500 were to be taken repeatedly, nearly $95 \%$ of the time, the sample proportion would remain inside 1.68 percentage points of the "true population point" - the number of people would have the same opinion.

However, there were 114 respondents, of which only 103 were eligible to answer the survey. Therefore, the response rate is only $2.94 \%$.

From the research perspective, although the collected response only small number of the target sample size, this research could still contribute to the topic of the effects of colour on customer buying behaviour.

This calculation is based on Sloven's formula:
$\mathrm{n}=\mathrm{N} /\left(1+\mathrm{Ne}^{2}\right)$
With:
n: number of samples
N : total population
e: error tolerance level
(Statistics How To, 2012)

Sloven's formula is used because the target audience is considered as international because of the international student population attending VAMK and a random number of people residing in Finland with different occupations. It is said that researchers use Sloven's formula to find the sample size when there is no adequate knowledge of the population’s behaviour (Statistics How To, 2012).

In conclusion, due to the small number of collected responses compared to the population size, the level of reliability of this research paper is not reliable enough. However, even though this data contributes a little, if not at all, to the research market, it could probably be a source for reviews or a starting point for further research.

### 3.1.6 Validity

Before distributing the questionnaire, the researcher's supervisor was consulted as well as a pilot test was done on a group of people in order to acquire constructive comments and improvement.
"External validity is a key criterion in quantitative research." (Eeva-Mari \& LiliAnne, 2011). Because it decides the possibility to generate assumptions based on the collected data and the ability of application of generated assumptions to other samples, periods of time and sceneries. (Eeva-Mari \& Lili-Anne, 2011)

Because of the above discussed reliability of this research paper, there are difficulties in applying the generalised results on other circumstances. Therefore, further researches on this topic are recommended.

### 3.2 Result analysis

This section analyses whether the collected responses to the questionnaire answer the research questions or not. Responses for some specific questions are combined to find a new perspective of understanding of the findings.

A total of 114 people participated in the questionnaire, out of which 11 having colour deficiency were not able to continue further to the main questions of the survey. (Figure 4)

Do you have colour deficiency?
114 responses


Figure 4. Percentage of colour-deficient respondents.

Respondents are mostly Finnish and Vietnamese, besides, there are also a minority of other nationalities including Austria, India, Italy, Iran, Russia, United Kingdom, and United States of America. Due to the fact that the majority is Finnish and Vietnamese, the data could probably contribute to future researches of export and import of the discussed product groups between the two countries. (Figure 5)

## Nationalities



Nationality

Figure 5. Nationality of the respondents.

Within the sample population, there are $68 \%$ female, $31.1 \%$ male and $1 \%$ prefer not to say. Respondents are mostly from the 18-year-old-to-25-year-old age range. (Figure 6 and Figure 7)

What is your gender?
103 responses


Figure 6. Gender


Figure 7. Age.

### 3.2.1 In a general perspective, how do customers understand colours?

Answers to part IV: Colour preference \& association are analysed to answer this research question, specifically, questions relating to the general meaning of colours. The given meaning is based on the mentioned theory of Eiseman (2006) for each colour, including red, blue, yellow, white, black; and each colour combination in-
cluding yellow and black, white and black. According to the data, there are 23 opinions opposing to the given meaning of red colour (Figure 8); 24 opinions are against the given meaning of blue colour (Figure 9); 33 opinions are against the given meaning of yellow colour (Figure 10); 20.4\% of 103 are against the given meaning of white colour (Figure 11) and 36 opinions are against the given meaning of black colour (Figure 12). In another words, on average, there are 76 opinions agreeing with the given general meaning of these colours. From the perspective of the researcher, this number could be essential when the colour perception of basic hues is taken into consideration. On the contrary, there are relatively large opposite opinions to the given meaning of the yellow-and-black combination and the black-andwhite combination, chronologically, 56.3\% and 70.9\% (Figure 13 and 14)

It could be concluded that the product appearance colour, including package and the product itself, could be based on the general meaning delivered by Eiseman (2006) to deliver the desired meaning. However, in the case of colour combination, designers should be careful if the general meaning of Eiseman would be applied.

```
Do you agree with these associations with RED colour?
103 responses
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Figure 8. Opinion on given meaning associated with red colour.

Do you agree with these associations with BLUE colour?
103 responses
$\left.\begin{array}{r|l|l|l|l|l|l|}\text { Commitment religiously } & & -5(4.9 \%) & & \\ \text { Quality \& stability } & & & \\ \text { Peace }\end{array}\right)$

Figure 9. Opinion on given meaning associated with blue colour.

Do you agree with these associations with YELLOW colour?
103 responses


Figure 10. Opinion on given meaning associated with yellow colour.

Do you agree with the association of WHITE = purity?
103 responses


- No

Figure 11. Opinion on given meaning associated with white colour.

Do you agree with these associations with BLACK colour?
103 responses


Figure 12. Opinion on given meaning associated with black colour.


Figure 13. Opinion on given meaning associated with a combination of yellow and black colour.

Do you agree with the association of BLACK + WHITE = utmost truthfulness?
103 responses


$$
\begin{aligned}
& \text { Yes } \\
& \text { No }
\end{aligned}
$$

Figure 14. Opinion on given meaning associated with a combination of black and white colour.

### 3.2.2 Base on what factors does the perceiver interpret the meaning colours?

Answers to part IV: Colour preference \& association are analysed to answer this research question. Combining the findings from questions regarding cultural/societal colour association and personal colour association, there are 34 answers agreeing with that their culture/society has colour associations, of which $55.9 \%$ saying
that they associate a specific colour with a meaning (Figure 15); within 69 answers saying otherwise about their culture/society, there are $63.8 \%$ saying they do not associate any colours with a meaning (Figure 16). Therefore, it could be that people also get affected from their surrounding culture/society or the surroundings where they grow up.


Figure 15. Proportion of individuals with their culture/society HAVING colour associations claiming that they personally have colour associations.


Figure 16. Proportion of individuals with their culture/society NOT having colour association claiming that they personally have colour associations.

Moreover, the majority of responses indicates that their colour preference also applies for kitchen equipment, which takes up to $61.2 \%$ of the total. However, the otherwise opinion also significantly large enough to show that one's colour preference might not actually apply to kitchen equipment. (Figure 17)

Does your colour preference mentioned above apply to kitchen equipment?
103 responses


Figure 17. Colour preference in case of kitchen equipment.

### 3.2.3 Does colour perception have any relations with customer buying behaviour in the Finnish market for kitchenware?

Answers to part II: General buying behaviour, part III: The most recent purchase and part V: Kitchenware with Pantone colour are analysed to answer this research question.

Firstly, the respondents' opinions on the colour diversity of kitchen equipment are not absolute, which could be an opportunity for manufacturers to improve their colour range to persuade the customers that there is an adequate colour diversity of such product class in Finland. (Figure 18)

Secondly, based on the usage frequency of respondents' most recently purchased product, points of importance of each pre-purchase criterion, including quality, design colour, convenience, price and brand, are given. For daily-used products, quality is the most important criterion and design colour comes at fourth place in the list. The rank of design colour criterion is the same, however, surprisingly enough, for all categories, the design colour takes over or equals with the brand criterion, in other words, the colour of the product might be more important than the fact that which company produces it (Figure 19). Figure 20 also shows that the brand factor is more likely to be excluded compared to the colour factor.

Do you think that, in Finland, there are a good diversity of colour selection for this product class?
103 responses


Figure 18. Opinion on colour diversity in Finland.


Figure 19. Pre-purchase criteria importance points categorised by usage frequency.


Figure 20. Expendable criterion

Additionally, the number of individuals who initially search for products with their favourite colour and otherwise are almost equal according to Figure 21. Combining Figure 17 and Figure 21, within the population saying that their colour preference applies to kitchen equipment, there are only $58.7 \%$ saying that they would actually search for those products (Figure 22). Accordingly, one's colour preference has a quite small impact on the customer product searching process.

Do you always look for products having your most favourite colour?
103 responses


Figure 21. Initial search for products with preferred colours.


Figure 22. Proportion of individuals stating their colour preference apply to kitchen equipment and initially search for that kind of products.

During the most recent purchase experience, respondents stated that the product colour was more attractive compared to the package colour. This could be also explained by the fact that most packages are going to be waste. However, Table 19 cannot prove that product colour is more important than other features due to the approximately equal amount between these two factors. (Figure 23)

In detail, within the population who chose package colour and product colour to be the appealing features, most of them state that the colour has been a neutral colour, $36.3 \%$ of the total state that the colour has been a dark colour, and the rest state that the colour has been a bright colour (Figure 24). In other words, in kitchen equipment product class, bright-coloured products would not be the most preferred compared to dark-coloured products and neutral-coloured products.


Figure 23. Attractive features.


Figure 24. Types of attracting colour.

In conclusion, even though the data has shown that, compared to other features, for example, quality, design colour is not as important in the pre-purchase criteria list, 65\% of the total respondents still claim that colour appearance does have impact on their purchase decision, either positively or negatively. (Figure 25)

Did the colour appearance affect your purchase decision?


Figure 25. Impact of colour appearance on purchase decision.

In addition to the three research questions, the questionnaire finds out more information about how respondents react to kitchen equipment with the Colour of the Year 2018 and 2019 forecasted by Pantone Institute (Figure 26 and 27). What's more is that $63.1 \%$ of the total respondents show no interest in colour trend of this product class (Figure 28). In short, this could mean that it is risky to base on forecasted trendy colour when designing such products.

How likely would have you bought kitchen equipment and tools with Colour of 2018?
103 responses


Figure 26. Likeliness to purchase kitchen equipment and tools with the Colour of the Year 2018.

How likely would you buy kitchen equipment and tools with Colour of 2019?
103 responses


Figure 27. Likeliness to purchase kitchen equipment and tools with the Colour of the Year 2019.

Are you interested in trendy colour of kitchen equipment and tools?

rg

Figure 28. Interest in trendy colours of kitchen equipment and tools.

### 3.3 Result summary

In conclusion, application of general colour meanings should be conducted with careful consideration. People are likely to get affected from the surrounding culture/society or where they grow up. Moreover, colour preference could or could not
be applied to the kitchenware product class. The reason is that there is not enough opinions neither against or supporting the application. Also, concerning the colour diversity of kitchenware in Finland, there is still room for improvement. The colour of the product might be more important than the fact that which company produces it. Furthermore, one's colour fondness has quite less impact on the customer product searching process. Concerning the level of attraction, bright-coloured kitchenware is less preferred than dark- and neutral-coloured ones. 65\% of 103 respondents claimed that colour appearance does have impact on their purchase decision. Last but not least, it is risky to base on forecasted trendy colour when designing such products.

## 4 CONCLUSION

During the competitive era, creativity is valuable. In the kitchenware industry, technology is shown through the products' functions, while the creativity is shown through the product overall, including colours of its design and package. However, at the time of publication of this research paper, there has not been many bachelor's thesis of the author's university researching the relationship between psychology of colour and customer buying behaviour. Therefore, the author decided to investigate the topic in order to, firstly, understand the topic, secondly, to contribute to the research market.

### 4.1 Research implication

In brief, colours could be considered as an important detail of a product in terms of winning attention over its rivals and communicating with buyers of the seller's messages, the product functions and quality. Colour seems to be the first visual stimulus to attract and communicate with potential consumers. Moreover, it is believed that consumers are physiologically and psychologically affected to product colours at the first encounter. Before the encounter happens, colours play the role of attentiongrabber. It is probable that this function influences most effectively to limited deci-sion-making shoppers, i.e. a person who possesses low knowledge of the product, or who is constraint by external factors, such as time. Also, colour properties, including hue, value and chroma, are also necessary to carefully concern. When the importance of colours is acknowledged, businesses would need to understand how their customers behave when purchasing, so that colours are utilized at their most efficiency. To meet the final decision, it would be recommended for the product development teams to research the market, raise questions and find the most potentially effective solution. These researches should concern the matter of context, market culture, consumer characteristics and the product line.

According to the collected statistical data, it seems that the sample are more likeliness to expend the colour factor when they purchase, still, colour most of the time functions pretty well as an appealing feature. Although, bright colours are generally
considered as more tempting, concerning kitchenware, that characteristic still works but it could not be as persuasive as neutral colours or dark colours when it comes to the purchase decision step. Furthermore, usually, people from a specific society are assumed to be influenced by their society's colour assumptions and the data has shown that this could be true but not everyone is affected. Also, because this is a psychological aspect, it differs from person to person. Therefore, the matter should be carefully studied when applying to the real market as well as when making generalisation.

### 4.2 Research limitations \& future research suggestions

Due to the small number of the sample size, the reliability level of this research paper has been reduced, but it could still be a starting point of future research. Also, this research is limited that it does not concern different level of colour properties but only primary hues, which can limit the range of colours being studied. Lastly, this research is limited to only people with full capability of colour sight.

Therefore, further research studying on people with colour-blindness is recommended as it is a niche market. Moreover, it is also recommended to expand the colour range in future research to increase the depth of colour knowledge. Last but not least, a larger number of sample size is necessary for such studies as it is from the customer's point of view.

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## APPENDICE

Appendix 1: Questionnaire

## Colour perception \& customer buying behaviour of kitchen tools and equipment

Data from this survey is utilized for the owner's thesis to understand the practical factor of the chosen topic.

The questions surround the home kitchen tools and equipment buying experience of user customers. Home kitchen tools and equipment include all kinds of pans, cooking utensils; electronic appliances using for food production, washing, heating, and beverage-making.

Moreover, dining utensils do not belong to the scale of this research.
Unfortunately, this research survey is limited in the way that it cannot be filled by person having colour deficiency.

Thank you for your time!
*Required

Do you have colour deficiency? *
$\bigcirc$ Yes
$\bigcirc$ No

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Never submit passwords through Google Forms.

## Background information

Where are you from? *
Choose

What is your gender? *
Female

Male

〇 Prefer not to say

How old are you? *

- $<18$

○ 18-25
(26-35
36-45
(46-55
$\bigcirc>55$
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## General buying behaviour

What is your preference of product style? *
○ Simple colourMulti-colour and patternBoth

How often do you buy kitchen equipment in average? *Once in 3 monthsOnce in 6 monthsOnce in 9 monthsOnce in 12 months

Why do you buy these products? *For studyFor workFor hobbyFor necessity

How often do you use these products in average? *
O Everyday

More than once a weekOnce a week

Rate the importance of each criterion to have a good purchase.
( $5=$ the most important) *

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Qualify | 0 | 0 | 0 | 0 | 0 |
| Design colour | 0 | 0 | 0 | 0 | 0 |
| Convenience | 0 | 0 | 0 | 0 | 0 |
| Price | 0 | 0 | 0 | 0 | 0 |
| Brand | 0 | 0 | 0 | 0 | 0 |

If there would be a product which fulfills all your criteria except one, would you still buy it? *
$\bigcirc$ Yes
O No

If yes, what would the excepted criterion be? Why?
Your answer
Do you think that, in Finland, there are a good diversity of colour selection for this product class? *
$\bigcirc$ YesNoMaybe

## The most recent purchase

Please remember that dining utensil does not belong to the scale of this research.
What is the product? *
Your answer

How often do you use this product in average? *
O Everyday
Once/week
More than once a week

Rate the importance of your pre-purchase criteria *

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Quality | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Design colour | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Convenience | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Price | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Brand | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

What feature attracted you first? *A. Package colourB. Product colourNoneOther:

If you chose $A$ or $B$, what was the type of colour?Bright colourDark colourNeutral colour

Did the colour appearance affect your purchase decision? *YesNo

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## Colour preference \& association

What is your MOST favourite colour/ colour combination? *

Your answer

What is your LEAST favourite colour/ colour combination? *

Your answer

Do you associate any colours with a certain meaning? *
O No

If yes, please give an example.

Your answer

Are you involuntarily attracted to the product colour resembling your national flag? *Maybe

Does your culture/society have any colour association? *
$\bigcirc$ Yes
○ No

If yes, please give an example.

Your answer

Does your colour preference mentioned above apply to kitchen equipment? *
$\bigcirc$ Yes
○ No

Do you always look for products having your most favourite colour? *
$\bigcirc$ Yes
○ No

Do you recognize products of a specific brand based on the brand colour? *
$\bigcirc$ Yes
○ No
Do you agree with these associations with RED colour? *
Life-threateningDelicious food/fruitSexyNone of aboveOther:

Do you agree with these associations with BLUE colour? *
Commitment religiouslyQuality \& stabilityPeaceNone of aboveOther:

Do you agree with the association of WHITE = purity? *

$\bigcirc$ Yes
O
Do you agree with these associations with YELLOW colour? *
PositivityEnlightenmentNone of aboveOther:

Do you agree with the association of YELLOW + BLACK = watch out? *
YesNo

Do you agree with these associations with BLACK colour? *
LuxuryPowerNone of aboveOther:

Do you agree with the association of BLACK + WHITE $=$ utmost truthfulness? *
YesNo

## Kitchenware with Pantone colour

Pantone is a colour institute whose colour trend forecast is based on by multiple companies in different industries.

How likely would have you bought kitchen equipment and tools with Colour of 2018? *


Ultra Violet 18-3838
Reference: https://www.housebeautiful.com/uk/lifestyle/a26136008/le-creuset-uk-ultra-violet/
$\begin{array}{lllll}1 & 2 & 3 & 4 & 5\end{array}$

Not likely

$\bigcirc 0$ 0 Very likely

How likely would you buy kitchen equipment and tools with Colour of 2019? *


Living Coral 16-1546
Reference:
https://julredesigns.com/blogs/thecolo rlab/tagged/fashion

|  | 1 | 2 | 3 | 4 | 5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not likely | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | Very likely |

Are you interested in trendy colour of kitchen equipment and tools? *

O Maybe

