Factors Affecting Customer Choice of Products in Terms of Color
in Chengdu, China

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China

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Business Administration in Marketing
Graduate School of Business
Assumption University
Academic Year 2012
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Major	Marketing
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Academic Year	2011

The Graduate School of Business, Assumption University, has approved this thesis as a partial fulfillment of the requirements for the Degree of Master of Business Administration in Marketing.

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ABSTRACT

To enable manufacturers, marketers, and other parties to develop a better understanding of Chengdu customers' choice of products in terms of color. Chinese attitude toward color, color of packaging, color of the main product, color of ambience and color of logo were taken into account to describe factors affecting customer choice of products in terms of color.

Total 1,000 questionnaires were distributed at five different supermarkets, namely, Carrefour China, Trust Mart, Ito Yokado, Ren Ren Le and Hong Qi. Based on the Statistical Package for Social Science, the data collected has been processed through descriptive analysis in terms of frequency, percentage and Pearson Correlation for hypothesis testing. And 662 questionnaires were collected, 600 questionnaires were used, and 62 questionnaires were dropped out of the screening question, which equals to 10.3% of the questionnaires collected.

The Pearson Correlation for hypothesis testing results show that, customer choice is affected by attitude toward color (86.1%), color of the main product (66.3%), color of package (50.3%) and color of ambience (65%). However, customer choice is not affected by color of logo (7.8%) at a significance level of 0.01.

The limitation on this research as it focused on factors affecting customer choice of products in terms of color, it is not applied to any situation or any level of products, emotionally or non-emotionally, it could not represent high cost products, such as luxury products or high-end products. In addition, it is not represent customers who have problems with color-blindness or an inherited defect in perception of red and green.

ACKNOWLEDGEMENTS

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CHAPTER 1

INTRODUCTION

In this chapter, eight sections are introduced. The first section is an introduction to this research. The second section expounds the statement of the problems. The third section describes the objectives of this research. The fourth section is the scope of this research. The fifth section describes its limitations. The sixth section is the significance of this study. And, the seventh section presents the definitions of terminology in terms of theory and the significance in this research. In the last section, the abbreviation words used in this study are listed.

1.1 Introduction to Study

Due to increasing self-service and changing of customer lifestyle, for both frequently purchased durable product (like soft drinks and biscuits) and infrequency purchased durable products (like automobiles and houses), customers are faced to large variety of choices (Garber, Burke and Jones, 2000). According to Rundh (2005), color attracts customer attention to a particular brand, enhances its image, and influences customers' perceptions about the product. Also color imparts a unique value to products (Underwood, Klein and Burke, 2001). Products are stepping into larger supermarkets and hypermarkets, and offering customers vast choices. It helps customers to choose the products from a wide range of similar products, and at the same time stimulates customers' buying behavior (Wells, Farley and Armstrong, 2007). Therefore, color performs a very important role in marketing communications and could be treated as one of the most important factors influencing customers' choice.

With the move to self-service retail formats, color increases its key characteristic as the salesman on the self at the point of sales. Modern customers are often looking for ways to reduce time spent on food shopping and preparation. It is necessary for marketers to build up a good understanding of their customers and explore what exactly it is that attracts them to a particular product.

Nowadays the technical functionality of many daily necessities products have almost reached their limits, can no longer be distinguished by means of their functionality. And the color corporate with…the product design is an opportunity for differential advantage in the market place (Kotler and Rath, 1984). The critical importance of a product design is growing in such competitive market conditions, as a product becomes a primary tool for communication (Ruth and Carol, 2000). Herewith,

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color and emotional aspects of the product design is becoming increasingly important, it can determine a person likes a particular product.

Literature review on topic under investigation has shown that there is no basic theory of color in marketing has as yet been advanced. Some researchers try to investigate possible factors affecting customer choice of products in terms of color (Estiri, Hasangholipour, Yazdani, Nejad and Rayej, 2010; Adams, and Osgood, 1973; Satyendra, 2006; Debby and Nelson, 2006; Edward, 1966; and Joseph, Ayn and Ronald, 2001).

In this research, attitude towards color, color of packaging, color of the main product, color of ambience and color of logo are used to measure the customer choice of products in terms of color and is based on Chengdu. The research model is developed and tested. In the regards, literature in the fields of customer choice, color and human factors have been searched.

1.1.1 Supermarket in China

The Supermarket industry in China is a part of China's Retail Trade sector. Enterprises within the Supermarkets industry in China are primarily engaged in retailing a broad range of food and daily goods. Most of the goods carried by supermarkets are purchased from domestic manufacturers in China.
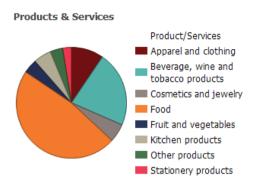
China is one of the world's most potential and fast growing supermarkets and products consumption market. According to NBS of China[1], Chinese Chain Store and Franchise Association, Chinese supermarkets skyrocketed from just one outlet in 1990 to approximately 60,000 stores, with an estimated RMB 587.17 billion in sales, by 2003 up to RMB 1.66 trillion in 2010.

China's supermarket industry continues to develop rapidly. There is beginning to be aggressive consolidation in the market, as larger operators swallow up smaller players. Foreign supermarket and hypermarket chains, such as Carrefour and Wal-Mart, have already entered into Chinese market, but room for expansion is now limited.

Figure 1.1: Description of supermarket shopping in China, 2010

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1. NBS s the abbreviation National Bureau of Statistics of the People's Republic of China. The information is available at http://www.stats.gov.cn/tjsj/qtsj/lslssyqysj/index.htm, accessed on 20 September 2011.
2. The exchange rate of Chinese Yuan to U.S. dollar in 2003 is 8.2770; The information is available at http://www.chinability.com/Rmb.htm, accessed on 20 September 2011.

Products & Services

Product/Services
- Apparel and clothing
- Beverage, wine and tobacco products
- Cosmetics and jewelry
- Food
- Fruit and vegetables
- Kitchen products
- Other products
- Stationery products

Source: Adapted from IBSW Group (2010). Chine supermarket overview 2010. Retrieved November, 2011, from http://www.ibisworld.com.cn.

As Figure 1.2 indicates, the major products and services covered in Chinese supermarket are: apparel and clothing, beverage, wine and tobacco products, cosmetics and jewelry, food, fruit and vegetables, kitchen products and stationery products

Figure 1.2: China's Supermarket Chain

For China's largest supermarket chains, sales are booming

$ Billion

- Nonggongshan
- Hualian
- Lianhua

1998   2000   2001   2002   2003

Data for 1999 not available.
Source: Shanghai Statistical Yearbook.

Source: Source: Fred G. & Thomas R. (2005). China's supermarkets present export opportunity 2005. Retrieved November, 2011, from http://www.atimes.com/atimes/China/GF24Ad02.html.

1.1.2 Color Background

In 1810, Johan Wolfang Von Goethe a great German philosopher published his theory of color. In 1840, it was published by John Murray in English in London.

Color is related to culture. Different cultures have different terms for color, it can be said the name of the color spectrum of different parts: for example, Chinese blue, has a meaning, covering the blue and green, blue and green colors are traditionally considered "青". Korea, on the other hand, the distinction between green and blue through the use of "靑(청) " and "綠 녹) " between the blue and green (Brent and Paul, 1969).

In a cross-cultural study, Wiegersma and Van der Elst (1988) found that blue was the most preferred color in general across cultures. Orange is the most sacred color in Hindu religion in India, but the Ndembo in Zambia do not even acknowledge orange as a color (Tektronix, 1988). Jacobs, Keown and Worthley (1991) studied cross-cultural colour comparisons and found that the color red was associated with love for people of China, Korea, Japan and the USA, but the Chinese also associated red with being good tasting. When concerning about the color of expensive or inexpensive products, for Chinese and Japaniese, the color gray was associated with the word inexpensive, the opposite was true among USA consumers. Colors were also associated with particular countries. For instance, red has a strong association with China.

Color can also be used to differentiate companies and products. The red color stimulates appetite because of its effect on our metabolism, making red a popular color choice among fast-food restaurants, for instance the Kentucky Fried Chicken and the Pizza Company. The yellow color is also used by fast-food moguls to hijack customers' interests (Kido, 2000). When it comes to yellow fast-food, everybody will think of the McDonald's immediately. By using colors, those companies can build up their own association and help their customers to locate their products (Heath, 1997).

1.1.3 Color in Chinese Culture

Color in Chinese culture refers to the various colors that are considered auspicious or inauspicious. The Chinese character for color is 颜色 (yánsè). In ancient China, the character more accurately meant color in the face, because the word 颜 means the face and the word 色 mean the color. During the Tang Dynasty color began to refer to all colors (Michael, 2000).

During the Shang, Tang, Zhou and Qin dynasties, the color black, red, blue, green, white and yellow are viewed as standard colors in Chinese art and culture. These colors correspond to the five elements of water, fire, wood, metal and earth, taught in traditional Chinese physics. (Needham, 1986).

Figure 1.3: Color Correspondent to the Five Elements in China

Source: Source: Michael, S. (2000). The Arts of China. Fourth edition. University of California

1.2 Statement of the Problem

Factors affecting customer choice of products in terms of color should be considered in plenty of ways, consisting of 1) Attitude towards color, 2) Color of Packaging, 3) Color of the main product, 4) Color of ambience and 5) Color of logo. These five categories will be used to describe the factors affecting customer choice of products in terms of color as follows. It is necessary for marketers to understand the factors that influence customer choice in terms of color. In order to generate more profits and build up their own association with customers, the better understanding and using of color must be considered.

Accordingly, the research focuses on the factors affecting customer choice of products in terms of color and for this purpose to find out if there is any association between various aspects of color and the customer choice. The following research questions are the statements of the problems researcher is attempting to solve.

1. What is the association level of attitude towards color with customer choice?

2. What is the association level of color of packaging with customer choice?

3. What is the association level of color of the main product with customer choice?

4. What is the association level of color of ambience with customer choice?

5. What is the association level of color of logo with customer choice?

1.3 Research Objectives

The aim of this research is to develop a composed model with a combination of Joseph, Ayn and Ronald (2001); Debby and Nelson (2006); Khalid (2005) and Estiri, Hasangholipour, Yazdani, Nejad and Rayej (2010), in order to research the factors affecting customer choice of products in terms of color in Chengdu. The following objectives are the aims of the study.

1. To analyze the relationship between attitude towards color and customer choice.

2. To analyze the relationship between color of packaging and customer choice.

3. To analyze the relationship between color of the main product and customer choice.

4. To analyze the relationship between color of ambience and customer choice.

5. To analyze the relationship between t color of logo and customer choice.

1.4 Scope of the Research

This research emphasizes the use of several color factors in the customer choice in order to investigate the association of the factors affecting customer choice of products in terms of color. The research questionnaire has been used as a instrument to observe the relationship of several factors in this study. Chengdu is the selected city for this research containing top five supermarkets which are Carrefour China, Trust Mart, Ito Yokado, Ren Ren Le and Hong Qi, respectively. In total, there are at least 600 questionnaires which will be distributed. Customers who are shopping in these supermarkets are considered as the population for this study.

The researcher has selected the customer choice as the dependent variable. The attitude toward color, color of packaging, color of the main product, color of ambience and color of logo have been taken as independent variables. The research questionnaire contains 25 questions which used as an investigation instrument. The data are measured by using the five-point Likert-scale.

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1.5 Limitations of the Research

This research has some limitations. First of all, the product which the researcher mentioned in this study is not applied to any situation or any level of products emotionally or non-emotionally, it could not represent high cost products, such as luxury products or high-end products, such as high-tech product. This study just talks about factors affecting customer choice of products in terms of color in Chengdu, China. Secondly, the questionnaire will be taken just in the supermarkets in Chengdu, which may not represent the online customers whose number is greatly increasing nowadays. Thirdly, the research has selected customer in Chengdu on specific, customers who shop in five supermarkets. And the research results only consider customers shopping in Chengdu. Fourthly, this research focused on factors affecting customer choice of products in terms of color; it can not represent customers who have problems with color, for instance color-blindness or an inherited defect in perception of red and green. Fifthly, there are several independent variables related to customer choice of products in terms of color that has been studied which provides one way to measure the factors affecting customer choice of products in terms of color in Chengdu, China. Sixthly, since this study has been conducted from August to November 2011, the research period is considered a time constraint as well.

1.6 Significance of the Study

Nowadays, color has played an important role in the designing of products. When products standing on the self and all other factors are equal, customers buy what looks best for them. Color is the foremost and also the most impressive product message. From manufacturers' point of view, understanding those factors should be relevant to design and produce more marketable products and obtain prospective customers which should bring about increased profits.

The research findings will present Chinese supermarkets' product color consumption and Chinese customers' view of product color, which will enable manufacturers, marketers, and other related persons to better understand the factors affecting customer choice of products in terms of color which could build up their own association with customers, help customers to locate their products and that will ensure more profits, expand customer markets and increase awareness.

1.7 Definition of Terms

Product: A product is a good or a service that marketers bring to the markets or segments which will be capable of meeting the requirements and at the same time yield enough profit to justify its continued existence (Kotler, Adam, Brown and Armstrong, 2006). In this research, products refer to supermarket products which affect the customer choices, for instance, daily necessities products. They are not applied to any situation or any level of products emotionally or non-emotionally.

Color: Color is defined according to three dimensions: shade, light and the saturation (Divard and Urien, 2001). In this research, it represents colored products in supermarkets.

Attitude: Attitude refers to the extent to which a person has a favorable or unfavorable evaluation or assessment of the behavior in question (Ajzen, 1991). In this research, attitude stands for Chinese customers' attitude towards a product's color. It can help to learn customers' behavior and hidden motivation (Jane, 1998).

Attitude towards Color: An attitude of an individual's toward a behavior is determined by beliefs about consequences of the behavior and the individual's evaluation of the consequences. As for color, the attitude of an individual towards color will affect the choice of the person of any product bearing that particular color. (Birren, 1983). In this research, a personal attitude towards color stands for the Chinese attitude towards product color. This research will not represent the customers' attitude towards any particular color. It just concerns the overall attitudes towards the product color in the supermarkets in China.

Color of Packaging: Packaging can be defined as an extrinsic element of the product (Olson and Jacoby, 1972). Kotler (2003) defined that there are six variables that must be taken into consideration when creating an efficient package: size, form, material, color, text and brand. As for packaging colors, it consider as means of attracting attention, creating aethetic experience, and delivering communication (Hannele and Harri, 2010). In this study, the color of packaging refers to the extrinsic color of the product. They are not applied to any particular brands or products.

Color of the Main Product: Every product has its own color before it gets packaged. For some products in their main color usually cannot be put used directly as they are without any decoration but many are not so (Danger, 1969). In this study, the color of the main product refers to the color which is intrinsic, for instance the main color of coke (carbonated beverage) is deep brown or black, but the packaging of the coke could be red, blue or silver etc., depending on the manufacturers, marketers as well as customers.

Color of Ambience: Collins (2002) defined ambience as a feeling or mood associated with a particular place, person, or thing. In this research, the color of ambience refers to color of the shopping environment which affect customers' purchase desire, for instance the ambience color of the Hello Kitty stores are always pink, and it attracts not only children but also girls and people who love pink to purchase their product. The ambience color of Hello Kitty stores represents cute and lovely products.

Color of Logo: Collins (2002) defined logo as a special design that identifies a company or an organization and appears on all its products, printed material, etc. Furthermore, it is also a representation of company name, brand value, history and express what company offers to customers. Color plays an important role in logos for causing memory and stimulates feeling. Many logos successfully incorporate the company image, such as the logo of Barbie. The pink is the only color that describes the pretty Barbie perfectly.

Customer Choice: McCracken (1986), defined customer choice as the right of customers to purchase product from a supplier other than their traditional supplier or from more than one seller in the retail market. In this research, it represents the Chinese customers' choice of colored products in supermarkets.

1.8 Abbreviations

Table 1.1 Abbreviations Used in the Study

Abbreviation	Description
RMB	The abbreviation of Chinese currency, Ren Min Bi; the other name is Yuan.
PRC	The People's Republic of China
NOAA	National Oceanic and Atmospheric Administration
PTO	Parent-Teacher Organization
NBS	National Bureau of Statistics of the People's Republic of China
UK	The United Kingdom
USA	The United States of America
USD or US$	The United States Dollar

CHAPTER 2

LITERATURE REVIEW

In this chapter three parts reviewing the literature relevant to the conceptual model. Various theories and models related to this study are discussed in order to construct a conceptual framework. The second part the previous literatures are reviewed to investigate the relationship between independent variables and dependent variables. Part three is in reference of the previous studies related to the research topic to further help to build a framework and test the hypothesis articulated.

2.1 Theory

2.1.1 Customer Choice

McCracken (1986) described customer choice as the right of customers to purchase product from an untraditional supplier or multiple sellers in the retail market.

Figure 2.1: Four Types of Consumer Choice Processes (Assael, 1998).

The figure indicates that consumer choice processes can be habitual, and based on such habits as brand loyalty or inertia. It has been highlighted that a large number of choices are, in fact, based on habitual behavior (Schreiber, 1994). A complex decision-making process means that information search may have begun some time before the actual choice. This indicates that the consumer evaluates and compares different brands and their features. However, scholarly studies show that consumers tend to seek for variety as well (Kahn 1998; Trijp, Hoyer and Inman, 1996), and as in the case of this study, it means that choices are also made at the point of purchase. This type of process is referred to as a limited decision-making process. This means that customers' decision-making takes place, but the process to make a choice lasts a very short time.

2.1.2 Color

Color is generally defined according to three dimensions (Divard and Urien, 2001): shade, light and the saturation. Small variations of color may lead to differing in marketing. Color cards or color samples are used to carry out color research and subjects are expected to tell color preference independent of the object conventionally. For instance, the directions in the Luscher and Scott (1969) color test state "Look the eight colors over and decide which one you like best. Do not attempt to associate the color with something else, such as dress materials, cars, automobiles, etc. Just choose the color for which you feel the most sympathy out of the eight colors in front of you" (Luscher and Scott, 1969). This implies that Luscher and Scott (1969) believed that there was a relationship between color preference and the product. It was proposed by Gordon (1994), that color communicated.

2.1.3 Attitude toward Color

An attitude of an individual's toward a behavior is determined by beliefs about consequences of the behavior and the individual's evaluation of the consequences. As for color, the attitude of an individual towards color will affect the choice of the person of any product bearing that particular color (Birren, 1983). Spranger (1928) identified six attitudes which are theoretical, utilitarian, esthetically, social, individualistic and conventional. These attitudes are typies or windowes through which we perceive the world and seek fulfillment in our lives.

2.1.4 Color of Packaging

The primary function of packaging is to protect the product against potential damage while transporting, storing, selling and exploiting a product (Gonzalez, Thorhsbury and Twede, 2007) and to ensure the convenience during performance of these activities. Herewith supermarkets contain thousands of products. One shelf will often display dozens of similar products. The color provides a first impression to customers. It was proposed by Unerwood, Klein and Burke (2001), that color of packaging would have an impact particularly when it comes to less familiar brands. Good looking packaging color can help to carve a particular value in customers' minds. It can be considered as an integral part of the product and is the first point of contact with the brand for a consumer product Rundh (2005).

2.1.5 Color of the Main Product

Danger (1969) defined color of the main product as every product has its own color before it gets packaged. For some products in their main color usually cannot be put used directly as they are without any decoration but many are not so.

2.1.6 Color of Ambience

Ambience, as defined by Collins (2002) is a feeling or mood associated with a particular place, person, or thing. It is the conscious designing of space to form effects in buyers. The color of ambience and color of atmosphere have same ways of influencing customer in the point of sales. Ambience is an attempt to design buying environments towards generating certain emotional effects in the consumer that enhance purchase probability (Kotler, 1973).

2.1.7 Color of Logo

Collins (2002) defined logo as a special design that identifies a company or an organization and appears on all its products, printed material, etc. Furthermore, it is also a representation of company name, brand value, history and express what company offers to customers. Color plays an important role in logos for causing memory and stimulates feeling (Khalid, 2005). Color offers an instantaneous method for conveying meaning and message in logo. It's probably the most powerful non-verbal form of communication. It is important to use color appropriately and understand the meaning behind the colors which customer chooses.

2.2 Review of Related Literature

2.2.1 Attitude toward Color and Customer Choice

No two people are exactly alike, even twins. People have their own positive and negative qualities and characteristics. Birren (1983) proposed that an individual determines an attitude toward a behavior by beliefs about results of the behavior and the individual's evaluation of the consequences. Individuals learn attitudes through experience and interaction with other people. Customers' attitudes towards a firm and its product greatly influence the success or failure of the firm's marketing strategy. Understanding the factors of attitudes that could enter into consumers' color choice may help to prevent marketers from wasting time and energy chasing the most recent trend

(Grossman and Wisenblit, 1999). In formal research of the effect of color on consumers in a retail setting, Bellizzi, Crowley and Hasty, (1983) manipulated the background color of a photograph of a furniture store and estimated the perception of customers of the store and numbers of store attributes. The outcomes illustrated that warm colors for instance yellow were more exciting, while cool colors such as blue were more calming. Bus other associations that consumers have may interfere with a marketer's intent for the use of that color (Grossman and Wisenblit, 1999). For instance, outdoor colors, such as green and blue are related to sporting goods stores and despite the fact that red may stimulate approach behavior in overall, it is not likely to be appropriate for such a retail environment (Grossman and Wisenblit, 1999).

Mundell (1993) discovered that personal needs of color preferences differ depending on the product and their favorite color was independent of these preferences. Personal needs of color preferences do not exist in a very vacuum; rather, personal needs of color preferences for specific objects or settings are dependent upon the situation and therefore the underlying associations' individuals may have developed (Grossman and Wisenblit, 1999). A number of investigation proposed that consumers may prefer certain color through others for various product categories (Grossman and Wisenblit, 999). A study carried out by Pantone (1992) discovered that the most admired colors for clothes were blue, red and black; besides, black was the most worn color for dressing occasions. Automobiles are desirable in blue, gray, red, and white and black.

2.2.2 Color of Packaging and Customer Choice

Packaging can be considered as an integral part of the product and is the first point of contact with the brand for a consumer product (Rundh, 2005). Gardon, Finlay and Watts (1994) studied "The Psychological Effects of Color in Consumer Product Packaging". The research focused on the colors of the packages. The results of their study support the suggestion that colors communicate. Colors were found to be related to the brand as they were found to communicate the quality of the brand. When a product stands on the self around with its competitors and substitutes, being special is the only way to help them "stand out". So as to influence customers in the shop, some stimulus must attract customers' attention. Previous appearance research analysis has documented that color of packaging attract consumers' attention (Plasschaert and Floet, 1995).

2.2.3 Color of the Main Product and Customer Choice

Several investigations accept that color of the main product have an impact on various customer issues. There are a majority of earlier color studies with marketing implications having centered on advertisements (Chamblee and Sandler, 1992). Other color of the main product studies have focused on colors and international branding (Grimes and Doole, 1998); product colors and gender (Debby and Nelson, 2004); the role of food colors on the perception of flavor (Garber, Burke and Jones 2000), and lately the effect of background color on product attitudes (Middlestadt, 1990). Although the number of published empirical color of the main product studies within the field of marketing is limited, colors have been examined extensively and reported in the field of psychology (Belizzi and Hite, 1992). Those studies have mainly focused on color preferences and the association of color (Taft, 1997).

2.2.4 Color of Ambience and Customer Choice

Ambience, as defined by Collins (2002) is a feeling or mood associated with a particular place, person, or thing. It is the conscious designing of space to form effects in buyers. Restaurant for instance, provides physical product, food, the culinary, serving, and tidy up. The quality and the prices have been the decisive factors in determining which restaurant prospered all along. Most food consumed outside of the home is eaten in diners and cafeterias where the ambience is the most pleasant, but rarely a major factor of the restaurant choice (Kulman, 2001). The ambience in which a product is purchased could be a significant and influential part of the entire product that may strongly influence product image and shopper behavior. In some cases, the ambience is the primary product. This study investigates the factors affecting customer choice of products in terms of color; it concerns the color of ambience as the environment color, as the changes of the color of ambience, it will influence customers' choice.

2.2.5 Color of Logo and Customer Choice

In case of purchasing, customers will pay more attention to the product which will attract the eye in a real purchase situation, as it 'catches their eye'. Color offers an instantaneous method for conveying meaning and message in logo. It's probably the most powerful non-verbal form of communication (Caudill, 986). It is important to use color appropriately and understand the meaning behind the colors which customer chooses.

2.3 Previous Studies

Literature indicates that a product visual color can affect customer evaluation, a purchase decision and a choice of products in different aspects. Many authors have mentioned that color of products play an important role in the customer product evaluation and selection process (Bloch, 1995; Garber, Burke and Jones, 2000; Veryzer, 1993; Veryzer, 1995). However, they did not explicitly discuss the factors affecting customer choice of products in terms of color in Chengdu, China.

Debby and Nelson (2006) designed the color and product choice model in their article: "Color and product choice: a study of gender roles." This research mainly analyzed factors that affect customers' choices in Malaysia. Gender has also been presented as an important factor of color penchant and proclivity. The study categorized factors as: color significance, attitude towards color, color attractiveness, normative color, color preference and gender. They investigated the relationship between these six constructs with the product choice based on a survey of 262 customers using questionnaires, but only 196 copies of the questionnaires were usable, if a selected respondent did not have a car, she/he was dropped from the survey exercise. The research used the hypotheses through the multiple regression analysis. The result indicates that five constructs (attitude towards color, color attractiveness, normative color, color preference and gender) predicted strong correlations with the product choice. Only the significance of color has no impact on consumers' car choice.

Bytyqi, Klemetsdal, Odegard, Mehmeti and Vegara (2005) have research on investigation of consumer choice in regard to dairy products in Kosovo. This survey was carried out by the Department of Livestock and Veterinary Sciences, Agriculture Faculty of Prishtina, Kosovo during 2007. Interviews of 304 were carried out in supermarkets (677) and mini-markets (397) and later 23 interviews were complete in the green market. Perceptions of consumers about dairy products were assessed using different variables. Habits, trust, price, quality, product's appearance, ages of consumer, origins of products, types of shops, brands and gender of consumers. It was the conclusion after analysis that product's appearance has great effect on the purchase of dairy products.

Joseph and Robert (1992) studied "Environmental color, consumer feelings, and purchase likelihood". The study was designed to learn about the relationship between consumer perception environmental color feeling and customer's purchase choice. This research based on the 170 respondents whose data were collected through a local Parent-Teacher Organization (PTO) in USA. Members of the PTO who volunteered were also encouraged to recruit their friends and neighbors to participate. The result indicates that

the purchase out come was related to the color treatment. Chi-square analysis also revealed that purchase outcomes across all purchase alternatives and color treatments were related at the 0.05 level.

Teresa (2002) studied "The effects of room color on stress perception". The study investigates how room color affects customers' views and feelings. This was based on the 30 psychology undergraduate students at Minnesota State University, Mankato. Numbers for males and females were equal with an average age of 18 year. The researcher found out that room color has a positive association with both customer feelings and customer choices. There was a general trend which can be observed in the direction of significance. Significant scores in gender data suggest that males may not be as sensitive to color stimuli compared to females and rate their perceived stress much lower.

Nelson, Barber and Janis (2006) studied "Motivation factors of gender, income and age on selecting a bottle of wine". A self-administered questionnaire was used to evaluate socio-demographic characteristics (age, gender, and income level), consumer choice activities (Frequency of use, type of information sources) and psychographic information (opinion, motivations and attitudes). The questionnaire used closed-ended and five-point Likert-type scale questions. Data collection for this study was conducted in the State of Connecticut. A selection of 5 wineries was made for data collection with a total of 1,000 questionnaires handed out to customers. The results of this research indicate that gender, income and age predicted strong correlations with wine labels when customer were making the selection.

Judy, Stuart and Antonio (2003) studied "Impact of color and packaging as stimuli in decision making process for a low involvement non-durable product." Data collection for this study was conducted in the Swinburne. The respondents used a constant sum scale (out of 100) to rate the six attributes of flavor, quality, brand, price, size and the color of the packaging. The results of this research indicate that the flavor of the potato chips was the most important stimulus, accounting for 38 points. Quality ranks the second, accounting for 21 points. Color, brand and price were about equal importance.

Geng, Yao and Ji (2005) designed the product's appearance color related factors frameworks in their article "An empirical study of product's appearance color factors in China". The study investigated how product's original color, product's original form, environment impact and demographic factors influence the customer choice in an instant of time they make their decision. The study was written in Chinese and based on 957 questionnaire results which were collected from actual customers of department stores in

Shanghai. Product's original color and product's original form were found to be directly related to product's appearance color. And product's appearance color was found to be influenced by natural environment impact. In addition, product's appearance color shows a stronger correlation with product original factors than natural environment impact.

Luz (2000) studied "The impact of ad background color on brand personality and brand preferences". The purpose of this study is to investigate the impact of one type of non-verbal executional cue in print advertisements on brand image, brand personality and brand preference. It was based on the 73 undergraduate students from California State University. The results of this research indicate that the brand in the red advertisement was perceived as having more competent and sophisticated personality; healthier and higher image beliefs then in blue. And the brand in blue advertisement was perceived as having more sincere, relaxing, refreshing, higher energy beliefs and cheaper than in red.

Table 2.1: Summary of Previous Studies

Author	Variables	Findings
Debby and (2006)	Color significance, attitude towards color, color attractiveness, normative color, color preference, product choice and gender	The result indicates that five constructs (attitude towards color, color attractiveness, normative color, color preference and gender) predicted strong correlations with product choice.
Bytyqi, Klemetsdal, Odegard, Mehmeti and Vegara (2005)	Habits, trust, price, quality, product's appearance, age of consumer, gender origin of product, brand type of shop, and customer choice	Trust, price, quality habit, origin of product and brand were directly related to customer choice. In addition, age of consumer, gender and product's appearance showed a positive influence on customer choice.

Joseph and Robert (1992)	Environmental color, consumer feelings, and purchase likelihood	The result indicates that purchase outcome was related to the color treatment. Chi-square analysis also revealed that purchase outcomes across all purchase alternatives and color treatments were related at the 0.05 level.
Teresa (2002)	Room color (atmosphere), customers' stress perceptions and gender	The researcher found out that room color (atmosphere) has a positive association with both customer feelings and customer choice. Significant scores in gender data suggest that males may not be as sensitive to color stimuli compared to females and rate their perceived stress much lower.
Nelson, Barber and Janis (2006)	Age, gender, and income level, frequency of use, type of information sources, opinion, motivations and attitudes	The results of this study indicate that gender, income and age predicted strong correlations with wine labels when customer are making the selection. In addition, attitude show a positive influence on the product choice.
Judy, Stuart and Antonio (2003)	Flavor, quality, brand, price, size and the color of the packaging.	The results of this research indicate that the flavor of the potato chips was the most important stimulus, accounting for 38 points. Quality ranks the second, accounting for 21 points. Color, brand and price were about equal importance.
Geng, Yao and Ji (2005)	Customer choice, product's original color, product's original form, product's original quality, environment impact, age, gender, background and	The results indicate that seven constructs (product's original color, product's original form, product's original quality, natural environment impact, age, gender and background) predicted strong correlations with product appearance

	product appearance color	color. Moreover, product's original color and product's original quality are the most significant factors which play a critical role in the Chinese customer choice.
Luz (2000)	Background color, brand personality, brand attribute beliefs,	The results of this research indicate that the brand in the red advertisement was perceived as having more competent and sophisticated personality; healthier and higher image beliefs then in blue. And the brand in blue advertisement was perceived as having more sincere, relaxing, refreshing, higher energy beliefs and cheaper than in red.

CHAPTER 3
RESEARCH FRAMWORK
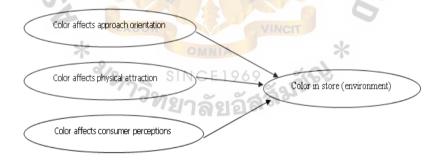
In this chapter, the research framework of factors affecting customer choice of products in terms of color is discussed. The conceptual framework and research hypotheses are then developed based on these theoretical frameworks. The operationalization of the variables is also presented in order to provide a clear picture of the research framework and all related variables in this study.

3.1 Theoretical Framework

This research tends to investigate the factors related to supermarket shopping, include attitude toward color, color of packaging, color of the main product, color of ambience, color of logo and customer choice. Hypotheses are introduced specifying the relationships between the factors affecting customer choice of products in terms of color and the customer choice. The measurements for appraising and confirming the relationships among the posited factors leading to color appearance and customer choice at supermarkets were presented.

Figure 3.1: Effects of Color in Store Design
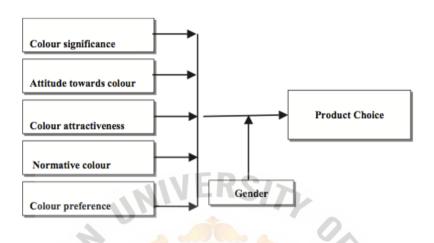
Source: Adapted from Joseph A. a d, Ayn E. Crowley and Ronald W. Hasty (2001). "The effects of color in store design." *Journal of Retailing*, Vol. 59 No. 1, 1983, pp.21-43.

Joseph, Ayn and Ronald (2001) studied the factors that may affect the color in store. Three dimensions of color factors including color affect approach orientation; the color affects physical attraction; and color of a retail store display area affects consumer perceptions of the store environment and merchandise were considered, and the correlations with color in the store explained. They found that color is associated with

physical attraction. It suggests that color can have customer drawing power as well as image-creating potential in the retail store design.
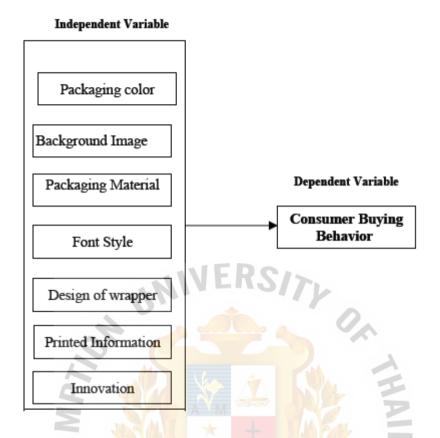
Figure 3.2:   Color and Product Choice

Source: Adapted from Debby Funk and Nelson Oly Ndubisi (2006). "Color and product choice: a study of gender roles." *Management Research News,* Vol. 29 No. ½, 2006, pp.41-52.

Debby and Nelson (2006) studied the factors that may affect the color and product choice. This research designed the color and product choice model in their article. They mainly analyzed factors that may affect customers' choice. Analyzing the color-impact domain in Malaysia. Gender has also been presented as an important factor of color penchant and proclivity. This study categorized factors as: color significance, attitude towards color, color attractiveness, normative color, color preference and gender. They investigated the relationship between these six constructs with the product choice. The analysis indicated that color preference is not the sole determinant of customers' choice of the product color. Customers are more likely to buy cars bearing their preferred color, cars painted in the color they have a favorable or positive attitude towards, color they consider attractive, and color that is acceptable to those who are important to them or who influence their behaviors, such as family members and friends. The significance of color has no impact on customers' car choice.
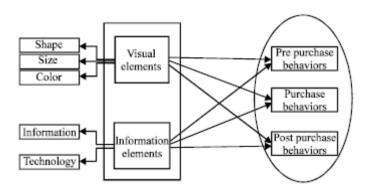
Figure 3.3:   Role of Packaging on Consumer Buying Behavior

Independent Variable

| Packaging color |
| Background Image |
| Packaging Material |
| Font Style |
| Design of wrapper |
| Printed Information |
| Innovation |

Dependent Variable

Consumer Buying Behavior

Source: Adapted from Khalid, A. (2005) "Role of Packaging on Consumer Buying Behavior" *Student of Superior University, Lahore*, 29-44.

Khalid, (2005) studied the role of packaging on consumer buying behavior. It mainly analyzed factors that may affect customers buying behavior. This study categorized factors as: packaging color, background image, packaging material, font style, design of wrapper, printed information and innovation. They investigated the relationship between these seven constructs with the customer buying behavior. The analysis indicated that most customers like the product quality after they purchased their desired packaged products. Packaging is perceived to be part of the product and it can be difficult for customers to separate. It suggested that packaging has a better reach than advertising does.

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Figure 3.4: Food Products Consumer Behavior: The Role of Packaging Elements
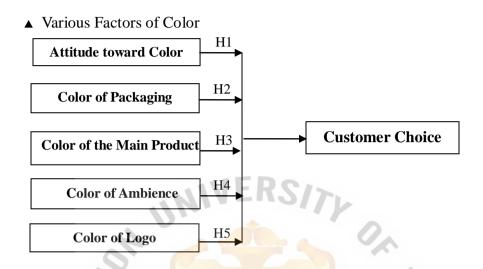
Source: Adapted from Estiri, M., Hasangholipour T., Yazdani H., Nejad H.J. & Rayej H., (2010). Food Products Consumer Behaviors: The Role of Packaging Elements. *Journal of Applied Sciences,* 10: 535-543.

Estiri, Hasangholipour, Yazdani, Nejad and Rayej (2010) studied the role of packaging elements. It mainly analyzed elements of food products packaging and purchase behavior stages. This study categorized factors as: shape, size, color, information and technology. They investigated the relationship between these five constructs with the three purchase stages. The three stages of purchase decision including: pre-purchase, purchase and post-purchase. The analysis indicated that the impact of packaging elements in purchase stage is more than any other stages. The element of color, shape and technology of package has a significant effect on customer purchase decision.

3.2 Conceptual Framework

Figure 3.5: Adjusted Conceptual Framework of Factors Affecting Customer Choice of Products in Terms of Color in Chengdu, China

▲ Various Factors of Color

Source: Adapted from Joseph, Ayn and Ronald (2001); Debby and Nelson (2006); Khalid Azeem (2005) and Estiri, Hasangholipour, Yazdani, Nejad and Rayej (2010).

.

The researcher has designed the conceptual framework from the preceding theoretical frameworks. For attitude toward color, color of packaging, color of the main product, color of ambience and color of logo are used to describe factors affecting customer choice of products in terms of color. The five factors are linked to color in order to examine each factors affecting customer choice of products in terms of color. Thus, all the variables have been categorized as follows:

Independent Variables: Attitude towards color, color of packaging, color of the main product, color of ambience and color of logo

Dependent Variable: Customer choice

3.3 Statistical Hypotheses

Sekaran (2003) defined "hypotheses as conjectural statements of the relationship between two or more variables that carry clear implications for testing the stated relations". In this research, the hypothesis is to determine the factors affecting customer choice of products in terms of color in Chengdu, China. The hypotheses posed in this research are the following:

Hypothesis 1:

H1o: There is no association between attitude towards color and customer choice.

H1a: There is an association between attitude towards color and customer choice.

Hypothesis 2:

H2o: There is no association between color of packaging and customer choice.

H2a: There is an association between color of packaging and customer choice.

Hypothesis 3:

H3o: There is no association between color of the main product and customer choice.

H3a: There is an association between color of the main product and customer choice.

Hypothesis 4:

H4o: There is no association between color of ambience and customer choice.

H4a: There is an association between color of ambience and customer choice.

Hypothesis 5:

H5o: There is no association between color of logo and customer choice.

H5a: There is an association between color of logo and customer choice.

3.4 Operationalization of the Independent Variables and Dependent Variables

Cooper and Schindler (2001) defined operation definition as a definition stated in terms of specific testing criteria or operations that must specify the characteristics of the study and how they are observed. The choices of specific research operations have been developed.

Variables	Operational Definition	Operational Component	Level of measurement
Attitude Toward Color	An attitude of an individual's toward a behavior is determined by beliefs about consequences of the behavior and the individual's evaluation of the consequences. As for color, the attitude of an individual towards color will affect the choice of the person of any product bearing that particular color. (Birren, 1983).	I believe the product value will change when the color of the product changes. I believe color is a key aspect for me to distinguish similar products. I believe successful color matching can lead me to buy the product.	Interval scale
Color of Packaging	Packaging can be defined as an extrinsic element of the product (Olson and Jacoby, 1972). As for packaging colors, it consider as means of attracting attention, creating aethetic experience, and delivering communication (Hannele and Harri, 2010).	Every successful product has a successful color of packaging. The color of packaging should reflect the product theme. The color of packaging is one of the key aspects that attracted me to buy the product.	Interval scale

Table 3.1: Operational Definition of Dependent and Independent Variables (cont.)

Color of the Mian Product	Every product has its own color before it gets packaged. For some products in their main color usually cannot be put used directly as they are without any decoration but many are not so (Danger, 1969).	I pay much attention to the color of the main product. I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color. When it comes to certain color, I will associate it to certain main product immediately.	Interval scale
Color of Ambience	Collins (2002) defined ambience as a feeling or mood associated with a particular place, person, or thing.	I believe ambience and color matching are closely related. I believe color of ambience need to cater to color of product. The appropriate color of ambience can lead me to buy the product.	Interval scale
Color of Logo	Collins (2002) defined logo as a special design that identifies a company or an organization and appears on all its products, printed material, etc. Furthermore, it is also a representation of company name, brand value, history and express what company offers to customers.	I believe logo and color matching are closely related. The color of logo can help me to distinguish similar products The color of logo is an aspect that attracted me to buy the product.	Interval scale

Table 3.1: Operational Definition of Dependent and Independent Variables (cont.)

Customer Choice	McCracken (1986), defined customer choice as the right of customers to purchase product from a supplier other than their traditional supplier or from more than one seller in the retail market.	If the color appeals to me, I will buy the product with that color. If the color appeals to me, I will recommend my relatives and friends to buy the product with that color. If the color appeals to me, I will point out the positive aspects if somebody criticizes them.	Interval scale

CHAPTER 4
RESEARCH METHODOLOGY

The premise of this chapter is to provide an overview of the research methodology adapted in this study. This chapter considers the research methods, respondents and sampling procedures, research instrument, pretest, collection of data and statistical treatment of data used in this study.

4.1 Method of Research Used

This research is done in order to determine and describe the characteristics of a population (Zikmund, 2004). The research aims to find out if there are correlations between customer choice and factors affecting customer choice of products in terms of color among Chengdu based supermarket customers. This study analyzes the independent variables (attitude towards color, color of packaging, color of the main product, color of ambience and color of logo) that affects the dependent variables (customer choice).

In addition, survey technique will be used to collect data from respondents in this study. Zikmund (2004) defined survey as a research technique in which information is gathered from a sample of people who answer the questionnaires; or a method of data collection based on communication with a representative sample of the target. The objective of this research is to measure the relationships among variables. Moreover, a survey provides a quick, inexpensive, efficient, and accurate means of assessing information about the population. In order to collect data, the researcher distributed the questionnaire to supermarket customers in Chengdu. The researcher also used secondary data from articles and journals that are related to this research.

4.2 Respondents and Sampling Procedure
4.2.1 Target Population

Sekaran (1992) defined that a "population" is the entire group of individuals willing to share a set of traits and interests. The target population is the specific complete group that is relevant to the research. According to CCSR (Chinese Consumer Survey Report) 2009, with the development of the supermarket culture, Chinese people have become accustomed to shop in the supermarket, at least 80% of Chinese people often shopping in the supermarkets. Which is the largest group among the Chinese

shopping forces. Therefore, the target population of this study is Chengdu-based people shopping in the supermarkets.

4.2.2 Sampling Unit

A sample is a subset, or some parts, of a larger population, and a sampling unit is defined as a single element or group of elements subject to selection in the sample (Zikmund 2004). The sample in this study is people who shop in the supermarket in Chengdu. And, during October-November 2011 survey period, each customer represents the sampling unit of this study.

4.2.3 Sample Size

Previous studies were made mention of in order to determine the sample size. Zikmund (2004) studies that are similar could provide a comparison and help the researcher determine the sample size for this study. Debby and Nelson (2006) conducted a study with 262 respondents to examine the relationship among attitudes towards color, color attractiveness, normative color, color preference and gender with product choice. Bytyqi, Klemetsdal, Odegard, Mehmeti and Vegara (2005) have research on investigation of the consumers' choice in regard to dairy products in Kosovo. They analyzed 304 interviews in supermarkets (677) and mini-markets (397) and later 23 interviews were completed in the green market. Joseph and Robert (1992), who studied environmental color, consumer feelings, and purchase likelihood in USA, analyzed 170 questionnaire results collected by using local Parent-Teacher Organization (PTO) in USA. Nelson, Barber and Janis (2006) studied "Motivation factors of gender, income and age on selecting a bottle of wine" through a self-administered questionnaire. In order to collect data, a total sum of 1,000 questionnaires handed out to customers of 5 wineries. And Geng, Yao and Ji (2005) designed the product's appearance color related factors frameworks in their article "An empirical study of product's appearance color factors in China". The study was based on 1067 questionnaire results which were collected from actual customers of department stores in Shanghai. And then, Luz (2000) studied "The impact of ad background color on brand personality and brand preferences". It was based on the 73 undergraduate students from California State University.

Concerning the target population of this research, it is hard to be predicted; accordingly, a proportion technique will be adopted to calculate the sample size (Berenson and Levine, 1999). The sample size required can be calculated as follows:

Formula:　　　$n = \dfrac{z^2\,p(1-p)}{e^2}$

Description:

　n = required samples size

　p= the population proportion in the projected area for the research. Assume it is 0.5; 1-p = o.5, estimated proportion of failure

　e^2= margin of error between the true proportion and the sample proportion. Assume e is 0.05 (standard value).

　Then, the number of standard of t associated with the confidence level is equal to 1.96.

　This research set a 95% (t=1.96) confidence interval level which means research can be 95% certain. The level of the sampling error is 0.05($\pm$ 5%).

The sample size of this study is equal to the following:

$$n = \dfrac{z^2\,p(1-p)}{e^2}$$

$$= \dfrac{3.8416 * 0.5 * 0.5}{0.0025}$$

$$= 384.16 \sim 384$$

Where

z　= 1.96(confidence level in standard error)

p　= 0.5 (the population proportion for this research)

1-p = 0.5 (estimated proportion of failure)

e　= 0.05 (margin of error between the true proportion and the sample proportion, at 5%)

Therefore, the sample size "n" in this study is calculated to be around 384 at the confidence level of 95%. In order to ensure the accuracy of the research findings, the researcher has selected 600 respondents as the sampling size for this research.

4.2.4 Sampling Procedure

Non-probability sampling technique procedure has been selected for the sample unit. Non-probability sampling is defined as a sampling technique in which units of the sample are selected on the basis of personal judgment or convenience; the probability of any particular member of the population being chosen is unknown (Zikmund, 2004).

Judgment Sampling:

Sekaran (1992), defined judgment sampling as the fact that the subjects who have been chosen are in the best position to provide the information required. Due to the unidentified population, the researcher has selected the population shopping in the big supermarkets in Chengdu. 99FANG, which is the largest real estate information service provider in Chengdu, provided the ranking of supermarkets in Chengdu in 2011. Regarding the location, size, customer flow and product categories, five big supermarkets selected are Carrefour China, Trust Mart, Ito Yokado, Ren Ren Le, Hong Qi. People shopping in these five supermarkets have been chosen as the sample.

Quota Sampling:

Zikmund (2004), defined quota sampling as a non-probability sampling procedure used to ensure that certain characteristics of a population sample which will be represented to the exact extent that the investigator desires. The questionnaire of this study will be distributed to the supermarkets in Chengdu, China in order to ensure the respondents of this research who can precisely represent the target population. Overall five supermarkets are selected which are, namely, Carrefour China, Trust Mart, Ito Yokado, Ren Ren Le and Hong Qi. Totally 600 questionnaires are used.

Table 4.1: Number of Questionnaires for Each Supermarket

Name of Supermarket	Questionnaires Distributed	Questionnaires Collected	Questionnaires Used	Answer color not affected *	Percentages of answer not affected **
1. Carrefour China	200	145	126	19	15 %
2. Trust Mart	200	130	114	16	14 %
3. Ito Yokado	200	133	121	12	9%
4. Ren Ren Le	200	125	119	6	5%
5. Hong Qi	200	129	120	9	7%
Total	1000	662	600	62	10.3%

As Table 4.1 indicate, the research distributed 1000 questionnaires at five supermarket in Chengdu, 662 questionnaires were collected, 600 questionnaires were used, and 62* questionnaires were not responded to the screening question (Will you choose to purchase any product because of its color appearance?). The percentage of the screening question which not affected equals to 10.3%**, showing that the research results only consider customers who will chose to purchase any products because of their color.

Convenience Sampling:

Sekaran (1992), defined convenience sampling process as the sample collecting technique that collects information from the units in the population which is expediently available to provide it. All responses are being collected using the convenience sampling technique. In addition, the researcher also provides more introductions and explanations for them when the respondents have problems.

4.3 Research Instrument

For the research instrument, the researcher used self-administered questionnaires as an instrument to gather data from the respondents. The questionnaire is developed based on various previous empirical researches (Debby, and Nelson (2006). Close-ended questions are used so that each respondent is given specific limited alternative choices and asked to select the one closest to his/her perception (Zikmund, 2004). These questions are used to gather primary data about customers' opinions on all the variables. The questionnaire consists of four parts and has a total of twenty-five items. Three parts of questions use a five-point Likert-scale, ranging from "strongly agree" to "strongly disagree". "With the Likert-scale, respondents indicate their attitudes by checking how strongly they agree or disagree with carefully constructed statements that range from

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very negative to very positive toward the attitudinal object" (Zikmund, 2004). In the questionnaire, the researcher has defined the different numbers to represent the opinion level:

1= strongly disagree

2= disagree

3= neither disagree nor agree

4= agree

5= strongly agree

The five steps are the following:

Part 1: Screening Question

Only one question is set in the screening question part. It is used for targeting the group as well as ensuring all the respondents are qualified. Customers who will choose to purchase any products because of their appearance color will be the target population of this research.

Part 2: Factors Affecting Customer Choice in terms of Color statement

Questions in this part are used to measure factors affecting customer choice of products in terms of color through variables: attitude towards color, color of packaging, color of the main product, color of ambience and color of logo. In all, a total of eighteen statements are used.

Part 3: Customer Choice of Products

This section measures consumer choice of purchase choice intentions. Three questions are distributed for the measurements.

Part 4: Demographic Data

Age, gender, marital status, educational level, occupation, income level, and frequency of supermarkets shopping per month are the criteria used to collect demographic information on the respondents. The personal data help to describe the sample characteristics of Chengdu supermarkets customers.

In addition, all the questions are translated into Chinese version in order to guarantee that the respondents can fully understand them and choose the correct choices.

Table 4.2: Arrangement of Questionnaire

Variables/ Sub-variables	Question Number	Measurement Scale
Screening Question	-	Nominal
Attitude toward Color	Questions 1~3	Interval Scale
Color of Packaging	Questions 4~6	Interval Scale
Color of the Main Product	Questions 7~9	Interval Scale
Color of Ambience	Questions10~12	Interval Scale
Color of Logo	Questions 13~15	Interval Scale
Customer Choice	Questions 16~18	Interval Scale
Demographic Data	Questions 19~25	Nominal

4.4 Pretests

Zikmund (2004) suggested that the tool of data collection needs to be reliable and therefore pre-tested with the respondent group in order to detect problems. Mistakes are found in terms of structuring, wording and changes made accordingly. Vanichbancha (2003) indicated that a pretest survey should have a minimum of 25 respondents. The researcher has distributed 50 questionnaires randomly in the five selected supermarkets in Chengdu in the first week of October 2011. Thanks to the staff in the supermarkets, 30 questionnaires were collected within one week. These questionnaires were used for pre-testing the study. The reliability of each construct measurement scale was measured using Cronbach's Coefficient Alpha test. If the reliable consistency is less than 0.6, this means that the questionnaire is considered poor or unrelated. If the result of Alpha test is greater than 0.6, it means the questionnaires are considered as acceptable (Sekaran, 1992). Based on the Statistical Package for Social Science (SPSS program), which was used to pretest the questionnaires, the results are as follows.

Table 4.3: Reliability Value Result

Variable	Number of Questions	Value of Reliability
Attitude toward color	3	0.672
Color of Packaging	3	0.663
Color of the main product	3	0.610
Color of Ambience	3	0.775
Color of logo	3	0.602
Customer choice	3	0.723

As shown in Table 4.3, all the values of reliability have results greater than 0.6, which means, the questionnaires developed are consistent and reliable for this study. Since all of the survey is based on extensive literature reviews, authentication was further confirmed. Color of Ambience rates the highest at 0.775. Customer choice ranks second at 0.723. Color of logo posits the relatively low value of reliability.

4.5 Data Collecting / Gathering Procedure

Zikmund (2004) suggested that primary data and secondary data are the two types of statistics collected in research. The primary data were collected by distributing questionnaires in Chengdu through 600 respondents who shopped in the five selected supermarkets and who believed that color has impact on their purchasing choices. In order to support this research, secondary data were gathered from online articles, journals and previous studies.

The primary data of this study will be gathered by distributing questionnaires in top five supermarkets in Chengdu, China. The researcher uses social networks. Provide questionnaires at the counter in each supermarket; the counters were located in front of cashiers on the first floor. In order to guarantee the accuracy of the study findings, more than 200 questionnaires were provided for each supermarket. Every day (from 2:00 p.m.to 9:00 p.m.) from October 25 to November 14, 2011, the researcher switched to the different supermarkets, going from Carrefour China, Trust Mart, Ito Yokado, Ren Ren Le and Hong Qi. Staff members in these supermarkets helped to distribute the questionnaires to some of the people shopping in these buildings and passing by the counters. A total 600 questionnaires were distributed during that period.

4.6 Statistical Treatment of Data

All the necessary data collected were summarized and analyzed in a readable and easily interpretable form using the Statistical Package for Social Science (SPSS). The data were coded into symbolic forms with SPSS software after being selected from respondents. In this analysis, the researcher used Pearson Product Moment Coefficient Correlation.

4.6.1 Descriptive Analysis

A descriptive analysis is aimed to interpret first-hand data to be structured in rationalized tables or graphic charts for intuitive understanding, and allows the researcher to make conclusions without any hypothesis (Zikmund, 2004). In this research, personal information gathered will be transferred to statistical tables to see if there are any different orientations or distributions among individuals from various ranks of age, gender, marital status, educational level, occupation, monthly income and frequency of supermarkets shopping per month. Percentage frequency and average are typical characteristics that this research will focus on, which provide the researcher an overall picture of selected representatives' traits or characteristics of factors affecting customer choice of products in terms of color.

4.6.2 Inferential Analysis

An inferential analysis is widely used in the questions of why and because, and allows researchers to conclude a generalization of a particular group with a limited number of samples. However, the casualty of generalization is not ensured (Zikmund, 2004). Given it is infeasible to access all Chinese consumers' choice of products in terms of color; an inferential analysis is necessarily needed.

4.6.3 Pearson's Product Moment Correlation Coefficient

The Pearson's Product Moment Correlation Coefficient measures the relationship between two variables. Zikmund (2004) defined the Pearson's correlation coefficient (r) as a parametric technique that gives a measure of the strength of association between variables. It varies from random relationship (0) to perfectly positive linear relationship (+1) or perfectly negative linear relationship (-1). According to Zikmund (2004), the formula below is for calculating the correlation coefficient (r) for the variable x and y are as follows:

$$r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{(n-1)s_x s_y}$$

Where:

x_i = Each x value

y_i = Each y value

$\bar{x}$ = Mean of the x values

$\bar{y}$ = Mean of the y values

n = Number of paired values

s_x = Standard deviation of x values

s_y = Standard deviation of y values

Where X bar and Y bar represent the average scores on the X variable and Y variable. The correlation coefficient (r-value) range between perfectly positive linear relation (+1) and perfectly negative linear relationship (-1). Table 4.4 below illustrates the r-value and corresponding strength of association.

Table 4.4: The r Value Table which Measures Strength of Association

Correlation Coefficient (r)	Interpretation
1.0	Perfectly positive linear correlation
0	No linear association
-1.0	Perfectly negative linear association
0.90 to 0.99	Very highly positive correlation
0.70 to 0.89	Highly positive correlation
0.40 to 0.69	Moderately positive correlation
0 to 0.39	Lowly positive correlation
0 to -0.39	Lowly negative correlation
-0.40 to 0.69	Moderately negative correlation
-0.70 to -0.89	Highly negative correlation
-0.9 to -0.99	Very highly negative correlation

Source: Hussey, J., & Hussey, R. (1997). *Business Research*, A practical guide for undergraduate and postgraduate students, p.227.

4.7 Statistical Tool Adopted for Hypotheses Testing

This study is to identify the factors of customer choice of products in terms of color. For any further research, Pearson's Correlation will be the primary technique. Table 4.5 below shows the statistical analysis summary of the null hypothesis description.

Table 4.5: Summary of Hypotheses and Statistical Analyses

No.	Null Hypotheses	Statistical Method Adopted	Question Number
H 1	There is no association between attitude toward color and customer choice.	Pearson Correlation coefficient	Questions 1~3
H 2	There is no association between color of packaging and customer choice.	Pearson Correlation coefficient	Questions 4~6
H 3	There is no association between color of the main product and customer choice.	Pearson Correlation coefficient	Questions 7~9
H 4	There is no correlation between color of ambience and customer choice.	Pearson Correlation coefficient	Questions10~12
H 5	There is no association between color of logo and the customer choice.	Pearson Correlation coefficient	Questions 13~15

CHAPTER 5

PRESENTATION OF DATA AND ANALYSIS

The purpose of this chapter is to identify the relationship among the variables. It includes three sections: a descriptive analysis of the demographic factors; a descriptive analysis of the variables; an analysis of collected data in terms of hypothesis testing. All these analysis use Statistical Package of Social Science (SPSS).

5.1 Descriptive Analysis of the Demographic Factors

Descriptive analysis is the research method used to describe the traits and characteristics of a target population (Zikmund, 2004). In this section, all the demographic information on the collected valid samples is analyzed in terms of age, gender, marital status, educational level, occupation, monthly income and frequency of supermarkets shopping per month so as to identify the objective features of consumers in Chengdu.

5.1.1 Simple Statistics Output of the Descriptive Analysis of Demographic Data

Table 5.1 Respondents' Gender

gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	204	34.0	34.0	34.0
	female	396	66.0	66.0	100.0
	Total	600	100.0	100.0	

As Table 5.1 indicates, in the supermarkets surveyed, the majority of shoppers are females, accounting for 66.0 percent of the total 600 valid respondents. Male consumers represent only one third, accounting for the rest of 34.0 percent of the total 600 valid samples.

Table 5.2 Respondents' Age

age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 years old	192	32.0	32.0	32.0
	26-35 years old	204	34.0	34.0	66.0
	36-45 years old	96	16.0	16.0	82.0
	more than 45 years old	108	18.0	18.0	100.0
	Total	600	100.0	100.0	

As Table 5.2 indicates, the majority of the respondents are in the 18 to 45 years old, accounting for 82.0 percent of the total 600 valid samples. 108 respondents aged over 45 years old participated in this investigation, accounting for 18.0 percent of the total 600. Within the four different age segments, the group aged between 26 and 35 years old has the highest frequency (204), accounting for 34.0 percent of the whole valid samples. The respondents aged between 18 and 25 years old rank second (192), accounting for 32.0 percent of the total. The respondents over 45 years old are the third largest group (108), accounting for 18.0 percent of the overall valid samples. In addition, 96 valid respondents are between 36 and 45 years old, representing only 16.0 percent of the total.

Table 5.3 Education Level of the Respondents

education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below bachelor degree	288	48.0	48.0	48.0
	bachelor degree	240	40.0	40.0	88.0
	master degree	36	6.0	6.0	94.0
	doctoral degree	36	6.0	6.0	100.0
	Total	600	100.0	100.0	

As shown in Table 5.3 the education levels of respondents fall primarily into four segments. The respondents whose education level is below a bachelor degree from the group with the highest frequency with a total of 288 valid samples, accounting for 48.0

43

percent of the 600 respondents. Those with bachelor degree rank second with 240 respondents, accounting for 40.0 percent of the total. The remaining two groups show an enormous gap with these two after mentioned groups. Respondents holding a master degree account for 6.0 percent of total 600 people surveyed (36 respondents). And those with a doctoral degree and above also account for 6.0 percent of all those surveyed (36 respondents), making these two groups represent a mere 12 percent of the total participants in the research.

Table 5.4 Marital Status of the Respondents

marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	252	42.0	42.0	42.0
	married	348	58.0	58.0	100.0
	Total	600	100.0	100.0	

Table 5.4 indicates the frequency distribution of the marital status of the valid respondents investigated. The respondents married represent the majority of those shopping in the supermarkets considered in this study, 348 in total, accounting for 58.0 percent of the entire group of the valid respondents. The group of single consumers is slightly below with a total of 252 persons, accounting for the remaining 42.0 percent of total 600 valid samples. There was no one falling in the divorced category.

Table 5.5 Occupation Level of the Respondents

occupation level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	government officer	84	14.0	14.0	14.0
	business employee	120	20.0	20.0	34.0
	entrepreneur	84	14.0	14.0	48.0
	other	312	52.0	52.0	100.0
	Total	600	100.0	100.0	

Table 5.5 indicates the frequency distribution of the occupational levels of the

respondents receiving the investigation. Based on the Job Classification list[2] in China (1999), Chinese occupations are classified into 8 major categories. In this research, the occupations of the respondents are fall into the list, which includes government officer, business employee, entrepreneur and others.

The occupational fall into four categories. The respondents with occupations other than those listed form the group with the highest frequency with a total of 312 valid samples, accounting for 52.0 percent of the respondents. Those employed in business companies rank the second with 120 respondents, accounting for 20.0 percent of total number of people surveyed. And the respondents employed both as government officers or entrepreneurs constitute the third highest group, accounting for 14.0 percent (84 respondents).

Table 5.6 Monthly Incomes of the Respondents

monthly income				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1000 yuan	12	2.0	2.0	2.0
	1001 - 2000 yuan	120	20.0	20.0	22.0
	2001 - 3000 yuan	132	22.0	22.0	44.0
	3001 -4000 yuan	192	32.0	32.0	76.0
	4001 yuan and above	144	24.0	24.0	100.0
	Total	600	100.0	100.0	

As Table 5.6 shows, the monthly income levels of the respondents have been divided into five segments in this research. The monthly income level that predominates falls into the range of RMB 1,001 to RMB 4,001 and above, accounting for 98.0 percent of total 600 valid samples. Within the four levels of highest frequency, the respondents with an income level of RMB 3,001 to 4,000 per month form the majority involved in this investigation, accounting for 32.0 percent of the samples (192 collected valid samples). The respondents with an income leveling at RMB 4,001 per month and above rank second with 144 valid samples, (24.0 percent of overall valid samples). Those with an income between RMB 2,001 to 3,000 per month rank third place with 132

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2. Job Classification List of the People's Republic of China classified Chinese occupations as 8 major categories, 66 classes, 413 subclasses, and 1838 small classes. The information is available at http://baike.baidu.com/view/496586.htm, accessed on 20 September 2011.

respondents, accounting for 22.0 percent of the total 600 valid samples. The last group with the highest frequency is the respondents earning between RMB 1,001 to 2,000 per month, a total of 120 respondents, accounting for 20.0 percent of the total. In this research, the group with lowest frequency is just the group with the lowest income level less than RMB 1,000 per month. Only 2.0 percent of the total samples fall into category.

Table 5.7 Monthly Shopping Frequency of the Respondents

monthly shopping frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 time	60	10.0	10.0	10.0
	1-5 times	432	72.0	72.0	82.0
	6-10 times	72	12.0	12.0	94.0
	more than 10 times	36	6.0	6.0	100.0
	Total	600	100.0	100.0	

Table 5.7 indicates the frequency distribution of the monthly shopping frequency of those surveyed. The monthly shopping frequency of the respondents falls into four segments. The respondents shopping 1 to 5 times per month are the group with the highest frequency with a total of 432 valid samples, accounting for 72.0 percent of the respondents. Those with a 6 to 10 time a month shopping frequency ranks second with 72 respondents, accounting for 12.0 percent of total 600 respondents. The respondents with less than 1 time shopping frequency rank as the third highest group, accounting for 10.0 percent with 60 valid samples. The respondents with a more-than-10 time shopping frequency rank as the lowest group, accounting for only 6.0 percent and 36 valid samples.

5.2 Descriptive Analysis of Variables

This part measures the Mean and Standard Deviation of each variable. According to Sekaran (1992), the "average mean" is the frequency used for measuring the central tendency for each grouped data. Standard deviation is the most important and useful measure of dispersion for each grouped data.

Independent Variables

Table 5.8: Mean and Standard Deviation of Attitude toward Color

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I believe the product value will change when the color of the product changes.	600	3	5	4.00	.347
Color is a key aspect for me to distinguish similar products.	600	3	5	3.90	.459
Successful color matching can lead me to buy the product.	600	3	5	4.80	.530
Valid N (listwise)	600				

Three questions are developed to measure Chengdu customers' attitude towards color. 600 valid samples are collected for analysis. As indicated in Table 5.8, in term of attitude toward color, the statement "Successful color matching can lead me to buy the product." has the highest mean 4.80, followed by "I believe the product value will change when the color of the product changes." With a mean of 4.00. The lowest mean, 3.90, comes from the statement "Color is the key aspect for me to distinguish similar products."

As to the standard deviation of product attitude towards color, the statement "Successful color matching can lead me to buy the product." has the highest standard deviation 0.530, followed by "Color is the key aspect for me to distinguish similar products." with 0.459. The lowest standard deviation is 0.347, which comes from the statement "I believe product value will change when the color of the product changes."

Table 5.9: Mean and Standard Deviation of Color of Packaging

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Every successful product has a successful color of packaging.	600	2	5	4.02	.679
The color of packaging should reflect the product theme.	600	1	5	4.12	.841
The color of packaging is one of the key aspect that attracted me to buy the product.	600	3	5	4.36	.819
Valid N (listwise)	600				

This research developed three questions as the measurement of color of packaging. Overall, 600 valid samples are collected for analysis. As indicated in Table 5.9, the statement "The color of packaging is one of the key aspect that attracted me to buy the product." has the highest mean 4.36, followed by "The color of packaging should reflect the product theme." With a mean of 4.12. The lowest mean, 4.02, comes from the statement "Every successful product has a successful color of packaging."

As to the standard deviation of packaging color, the statement "The color of packaging should reflect the product theme." has the highest standard deviation 0.841, followed by "The color of packaging is one of the key aspect that attracted me to buy the product." with 0.819. The lowest standard deviation is 0.679, which comes from the statement "Every successful product has a successful color of packaging."

Table 5.10: Mean and Standard Deviation of Color of the Main Product

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I pay much attention to the color of the main product.	600	3	5	4.00	.448
I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color.	600	2	5	3.94	.676
When it comes to certain color, I will associate it to certain main product immediately.	600	3	5	4.60	.693
Valid N (listwise)	600				

As indicated in Table 5.10, in term of color of the main product, the statement "When it comes to certain color, I will associate it to certain main product immediately." has the highest mean, 4.60, followed by "I pay much attention to the color of the main product.." represent mean 4.00. The lowest mean, 3.94, comes from the statement "I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color."

As to the standard deviation of color of the main product, the statement "When it comes to certain color, I will associate it to certain main product immediately." has the highest standard deviation, 0.693, followed by "I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color." with 0.646. The lowest standard deviation is 0.448, which comes from the statement "I pay much attention to the color of the main product."

Table 5.11: Mean and Standard Deviation of Color of Ambience

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ambience and color matching are closely related.	600	2	5	3.96	.489
Color of ambience need to cater to color of product.	600	2	5	3.94	.646
The appropriate color of ambience can lead me to buy the product.	600	2	5	4.72	.695
Valid N (listwise)	600				

As indicated in Table 5.11, in term of color of ambience, the statement "The appropriate color of ambience can lead me to buy the product." has the highest mean 4.72, followed by "Ambience and color matching are closely related." represent mean 3.96. The lowest mean 3.94 comes from the statement "Color of ambience need to cater to color of product."

For the standard deviation of color of ambience, the statement "The appropriate color of ambience can lead me to buy the product." has the highest standard deviation, 0.695, followed by "Color of ambience need to cater to color of product." with 0.646. The lowest standard deviation is 0.489, which comes from the statement "Ambience and color matching are closely related."

Table 5.12: Mean and Standard Deviation of Color of Logo

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Logo and color matching are closely related.	600	2	5	4.24	.650
The color of logo can help me to distinguish similar products.	600	3	5	4.48	.575
The color of logo is a key aspect that attracted me to buy the product	600	3	5	4.44	.638
Valid N (listwise)	600				

As indicated in Table 5.12, in term of color of logo, the statement "The color of logo can help me to distinguish similar products." has the highest mean 4.48, followed by "The color of logo is a key aspect that attracted me to buy the product" represent mean 4.44. The lowest mean 4.24 comes from the statement "I believe logo and color matching are closely related."

For the standard deviation of color of logo, the statement "Logo and color matching are closely related." has the highest standard deviation, 0.650, followed by "The color of logo is a key aspect that attracted me to buy the product" with 0.638. The lowest standard deviation is 0.575, which comes from the statement "The color of logo can help me to distinguish similar products."

Dependent Variable

Table 5.13: Mean and Standard Deviation of Customer Choice

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
If the color appeals to me, I will buy the product with that color.	600	3	5	4.00	.347
If the color appeals to me, I will recommend my relatives and friends to buy the product with that color.	600	3	5	3.96	.446
If the color appeals to me, I will point out the positive aspects if somebody criticizes them.	600	3	5	4.82	.518
Valid N (listwise)	600				

This research developed three questions as the measurement of customer choice. Overall, 600 valid samples are collected for analysis. As indicated in Table 5.13, the statement "If the color appeals to me, I will point out the positive aspects if somebody criticizes them." has the highest mean 4.82, followed by "If the color appeals to me, I will buy the product with that color." With a mean of 4.00. The lowest mean 3.96 comes from the statement "If the color appeals to me, I will recommend my relatives and friends to buy the product with that color."

For the standard deviation of customer choice, the statement "If the color appeals to me, I will point out the positive aspects if somebody criticizes them." has the highest standard deviation, 0.518, followed by "If the color appeals to me, I will recommend my relatives and friends to buy the product with that color." with 0.446. The lowest standard deviation is 0.347, which comes from the statement "If the color appeals to me, I will buy the product with that color."

5.3 Reliability Test

The reliability of each construct measurement scale was measured using Cronbach's Coefficient Alpha test. If the reliable consistency is less than 0.6, this means that the questionnaire is considered poor or unrelated. If the result of Alpha test is greater than 0.6, the questionnaires are then considered as acceptable (Sekaran, 1992). Based on the Statistical Package for Social Science (SPSS program), which was used to pretest the questionnaires, the results are as follows:

Table 5.14: Reliability Test

Variable	Number of Questions	Value of Reliability
Attitude toward color	3	0.672
Color of Packaging	3	0.663
Color of themain product	3	0.610
Color of Ambience	3	0.775
Color of logo	3	0.602
Customer choice	3	0.723

As shown in Table 5.14, all the values of reliability have results greater than 0.6, which means that the questionnaires developed are consistent and reliable for this study. Since all of the survey is based on extensive literature reviews, authentication was further confirmed.

5.4 Inferential Analysis and the Hypothesis Testing by SPSS

An inferential analysis was applied to test the different hypotheses. A hypothesis is an assumption or guess that a researcher makes about some characteristics of the population under study (Zidmund, 2004). The purpose of hypotheses is to test the relationships between each variable described in the conceptual framework. In this study, there are five hypotheses to be tested to determine the factors affecting customer choice of product in terms of color. The statistical technique, Pearson Product Moment

Coefficient Correlation, was used to test all the hypotheses. If the significance value is less than the chosen level of significance, the null hypothesis is rejected. Otherwise, the null hypothesis will be accepted. The results of hypothesis testing are as follows:

Hypothesis 1:

H1o: There is no association between attitude towards color and customer choice.

H1a: There is an association between attitude towards color and customer choice.

Table 5.15 Pearson Correlation for Attitude towards Color and Customer Choice

Correlations

		Attitude Towards Color	Customer Choice
Attitude Towards Color	Pearson Correlation	1	.861[**]
	Sig. (2-tailed)		.000
	N	600	600
Customer Choice	Pearson Correlation	.861[**]	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 5.15 indicates, the significance value of hypothesis 1 at two-tailed test equals .000, and is lower than 0.01 ($0.000 < 0.01$), which means the null hypothesis was rejected. The rejection of the null hypothesis signifies that there is an association between attitude towards color and customer choice at a significance level of 0.01.

The value of Pearson Correlation equals 0.861, showing that there is a highly positive correlation between attitude towards color and customer choice. Based on this indication, it can be concluded that the higher attitude towards color, the higher customer choice when shopping.

Hypothesis 2:

H2o: There is no association between color of packaging and customer choice.

H2a: There is a association between color of packaging and customer choice.

Table 5.16 Pearson Correlation for Color of Packaging and Customer Choice

Correlations

		Color of Packaging	Customer Choice
Color of Packaging	Pearson Correlation	1	.503[**]
	Sig. (2-tailed)		.000
	N	600	600
Customer Choice	Pearson Correlation	.503[**]	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 5.16 indicates, the significance value of hypothesis 2 at two-tailed test equals .000, and is lower than 0.01 (0.000＜0.01), which means the null hypothesis was rejected. The rejection of null hypothesis shows that there is an association between color of packaging and customer choice at a significance level of 0.01.

The value of the Pearson Correlation equals 0.503, indicating that there is a moderate positive relationship between color of packaging and customer choice. Based on this indication, it can be concluded that the higher color of packaging, the higher customer choice when shopping.

Hypothesis 3:

H3o: There is no association between color of the main product and customer choice.

H3a: There is an association between color of the main product and customer choice.

Table 5.17 Pearson Correlation for Color of the Main Product and Customer Choice

Correlations

		Color of the Main Product	Customer Choice
Color of the Main Product	Pearson Correlation	1	.663**
	Sig. (2-tailed)		.000
	N	600	600
Customer Choice	Pearson Correlation	.663**	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 5.17 indicates, the significance value of hypothesis 3 at two-tailed test equals .000, and is lower than 0.01 (0.000 < 0.01), which means that the null hypothesis was rejected. The rejection of the null hypothesis signifies that there is an association between color of the main product and customer choice at a significance level of 0.01.

The value of Pearson Correlation equals 0.663, which shows there is a moderate relationship between color of the main product and customer choice. Based on this indication, it can be concluded that the higher color of the main product, the higher customer choice will be when shopping.

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Hypothesis 4:

H4o: There is no association between color of ambience and customer choice.

H4a: There is an association between color of ambience and customer choice.

Table 5.18 Pearson Correlation for Color of Ambience and Customer Choice

Correlations

		Color of Ambience	Customer Choice
Color of Ambience	Pearson Correlation	1	.650[**]
	Sig. (2-tailed)		.000
	N	600	600
Customer Choice	Pearson Correlation	.650[**]	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 5.18 indicates, the significance value of hypothesis 4 at two-tailed test equals .000, and is lower than 0.01 ($0.000 < 0.01$), which means the null hypothesis was rejected. The rejection of null hypothesis signifies that there is an association between color of ambience and customer choice at significant level of 0.01.

The value of Pearson Correlation equals 0.650, which shows that there is a moderately positive relationship between color of ambience and customer choice. Based on the indication, it can be concluded that the higher color of ambience are, the higher customer choice will when shopping.

Hypothesis 5:

H5o: There is no association between color of logo and customer choice.

H5a: There is an association between color of logo and customer choice.

Table 5.19 Pearson Correlation for Color of Logo and Customer Choice

Correlations

		Color of Logo	Customer Choice
Color of Logo	Pearson Correlation	1	.078
	Sig. (2-tailed)		.057
	N	600	600
Customer Choice	Pearson Correlation	.078	1
	Sig. (2-tailed)	.057	
	N	600	600

As Table 5.19 indicates, the significance value of hypothesis 5 at two-tailed test equals .057, and is higher than 0.01 (0.057 > 0.01), showing that the null hypothesis was failed to reject. The failure to reject null hypothesis signifies that there is no association between color of logo and customer choice at a significance level of 0.01.

Table 5.20 summarizes the conclusion by testing the hypotheses with Pearson Correlation.

Table 5.20 Summary of Results from Hypothesis Testing

Null Hypothesis	Correlation Coefficient	Significant (2-tailed test)	Test Result
H1o: There is no association between attitude towards color and customer choice.	0.861(**)	0.000	Rejected Ho
H2o: There is no association between color of packaging and customer choice.	0.503(**)	0.000	Rejected Ho
H3o: There is no association between color of the main product and customer choice.	0.663(**)	0.000	Rejected Ho
H4o: There is no association between color of ambience and customer choice.	0.650(**)	0.000	Rejected Ho
H5o: There is no association between color of logo and customer choice.	0.078	0.057	Ho Failed to Reject

CHAPTER 6
SUMMARY, CONCLUTION AND RECOMMENDATION

This chapter includes the summary of the findings in relations to the demographic characteristics of the respondents and testing of the developed hypothesis, conclusion, recommendations, and suggestions for future studies.

6.1 Summary of Findings

This research was intended to indentify the factors affecting customer choice of products in terms of color. Five factors were tested the relationship with customer choice. A total of 600 respondents shopping in the five selected supermarkets in Chengdu were surveyed. The data collected has been processed through descriptive analysis in terms of frequency and percentage and Pearson Correlation for hypothesis testing.

6.1.1 Demographic Characteristics of Collected Samples

Customers who are shopping in Chengdu's top five supermarkets are considered as the population for this study. Both females and males aged above 18 years old taken into consideration. The educational levels of the respondents range between below a bachelor degrees and doctoral degree. The occupations of the respondents' are as government officer, business employee, entrepreneur and others included in the Job Classification list[3] in China. Chinese occupations are classified into 8 major categories (Job Classification List, 1999). The monthly income of the respondents ranges from less than 1,000 Yuan to 4001 Yuan and above. The frequency of supermarkets shopping per month ranges from less than 1 time to more than 10 times.

Based on the outcomes of the descriptive analysis, the demographic characteristics of the collected samples show the following aspects. Firstly, females constitute the majority of shoppers in the supermarkets surveyed in Chengdu, accounting for 66% of the total respondents. Male shoppers are only half of female respondents, accounting for 34% of the samples.

Secondly, a majority of the respondents are found in the 18 to 45 years old category. Those between 26 and 35 years old account for 34% of the valid samples.

3.　Job Classification List of the People's Republic of China classified Chinese occupations as 8 major categories, 66 classes, 413 subclasses, and 1838 small classes. The information is available at http://baike.baidu.com/view/496586.htm, accessed on 20 September 2011.

Respondents between 36 and 45 years, represent only 16% of the total 600 valid samples.

Thirdly, the education levels of respondents divided into four segments. Shows that respondents with education below a bachelor degree are form the group with the highest frequency, accounting for 48% of the total 600 valid samples. Those with a master degree account for 6% of the total 600 valid samples. And respondents with a doctoral degree and above also account for 6% of total 600 valid respondents.

Fourthly, a majority of the people shopping at the supermarkets and surveyed are married, accounting for 58% of the total respondents. Single shoppers account for the rest, 42% of the total 600 valid samples.

Fifthly, the respondents falling under the category other occupations form the group with the highest frequency, accounting for 52% of total valid samples. Those with job as government officers and entrepreneurs are both in the lowest groups, accounting for 14% of total 600 respondents each.

Sixthly, the monthly income level of most respondents fall within the range of RMB 1,001 to RMB 4,001 and above, accounting for 98% of those surveyed. The group with lowest frequency is the group with the lowest income level at only less than RMB 1,000. This group represents only 2% of the total 600 valid samples.

As to monthly shopping frequency of the respondents, the group with a frequency of 1 to 5 times is the one with the highest frequency, accounting for 72%. The respondents with a shopping frequency of more than 10 times ranks the lowest, accounting for only 6% of total 600 respondents.

Table 6.1 Demographic Characteristics of Collected Samples

Items	Frequency	Percentage
Gender		
Male	204	34.0
Female	396	66.0
Age		
18-25	192	32.0
26-35	204	34.0
36-45	96	16.0
More than 45	208	18.0
Marital Status		
Single	252	42.0
Married	348	58.0
Education Levels		
Below Bachelor Degree	288	48.0
Bachelor Degree	240	40.0
Master Degree	36	6.0
Doctoral Degree	36	6.0
Occupation		
Government Officer	84	14.0
Business Employee	120	20.0
Entrepreneur	84	14.0
Other	312	52.0
Monthly Income		
Less than 1,000 Yuan	12	2.0
1,000 - 2,000 Yuan	120	20.0
2,001 - 3000 Yuan	132	22.0
3,001 - 4000 Yuan	192	32.0
4,001 Yuan and above	144	24.0
Frequency of Supermarkets Shopping per Month		
Less than 1 time	60	10.0
1 – 5 times	432	72.0
6 – 10 times	72	12.0
More than 10 times	36	6.0

6.1.2 Summary of the Descriptive Analysis of Variables

The results of the questionnaire on each variable shows that the highest mean is 4.82, which comes from the statement on customer choice part "If the color appeals to me, I will point out the positive aspects if somebody criticizes them." As to the lowest mean, it comes from the color of packaging statement, "The color of packaging is one of the key aspect that attracted me to buy the product.", only 4.36 as a mean.

The statement "The color of packaging should reflect the product theme." in the color of packaging of the questionnaire has the highest standard deviation (0.841). The lowest standard deviation is 0.347 and pertains to the customer choice statement "I believe the product value will change when the color of the product changes."

Table 6.2 the Highest Mean in Each Variable

Question	Mean
Attitude Toward Color: Successful color matching can lead me to buy the product.	4.80
Color of Packaging: The color of packaging is one of the key aspects that attracted me to buy the product.	4.36
Color of the Main Product: When it comes to certain color, I will associate it to certain main product immediately.	4.60
Color of Ambience: The appropriate color of ambience can lead me to buy the product.	4.72
Color of Logo: The color of logo can help me to distinguish similar products.	4.48
Customer Choice: If the color appeals to me, I will point out the positive aspects if somebody criticizes them.	4.82

6.1.3 Summary of Hypothesis Testing

This research aims primarily to indentify factors affecting customer choice of product in terms of color. Pearson Correlation is the analyticed method adopted to test the hypothesis formed on the basis of the extensive literature review. The outcomes of hypothesis testing by SPSS show that four of total five null hypotheses are rejected at the .01 significant level, and one null hypotheses fails to reject. The findings of Hypothesis testing are presented in Table 6.3. The followings are the summary of hypothesis testing.

Hypothesis 1: Attitude toward Color has a significant influence on Customer Choice. The correlation coefficient of hypothesis 1 equals 0.861 (See Table 6.3), which indicates that attitude toward color has a highly positive influence on customer choice at a significance level of 0.01.

Hypothesis 2: Color of Packaging has a significant influence on Customer Choice. The value of the Pearson Correlation of hypothesis 2 equals 0.503 (See Table 6.3), which shows there is a moderately positive relationship between color of packaging and customer choice at a significance level of 0.01.

Hypothesis 3: Color of the Main Product has a significant influence on Customer Choice. The value of the Pearson Correlation of hypothesis 3 equals 0.663 (See Table 6.3), indicating that is a moderately positive relationship between color of the main product and customer choice at a significance level of 0.01.

Hypothesis 4: Color of Ambience has a significant influence on Customer Choice. The value of the Pearson Correlation of hypothesis 4 equals 0.650 (See Table 6.3), which means that there is a moderately positive relationship between color of ambience and customer choice at a significance level of 0.01.

Hypothesis 5: Color of Logo has significant influence on Customer Choice. The value of Pearson Correlation of hypothesis 5 equals 0.078 (See Table 6.3), showing that there is no relationship between color of logo and customer choice at significant level of 0.01.

Table 6.3 the Findings of Hypothesis Testing

Variables	Correlation Coefficient	Relationship
Attitude Toward Color → Customer Choice	0.861**	Positive Relationship
Color of Packaging → Customer Choice	0.503**	Positive Relationship
Color of the Main Product → Customer Choice	0.663**	Positive Relationship
Color of Ambience → Customer Choice	0.650**	Positive Relationship
Color of Logo → Customer Choice.	0.078	No Relationship

6.2 Discussion and Implication

To help manufacturers, marketers and any other person concerned efficiently explore Chengdu market; this research indentified and determines the factors affecting customer choice of products in terms of color. The findings of this study might provide theoretical implication for those who would like to delicate into the research of Chinese customers' choice of products in terms of color. This research may be an initial attempt to understand Chengdu customers' choice. This research developed an incorporated model based on models from Joseph, Ayn and Ronald (2001); Debby and Nelson (2006); Khalid Azeem (2005) and Estiri, Hasangholipour, Yazdani, Nejad and Rayej (2010).

Each hypothesis was analyzed using the Pearson's Product Moment Correlation Coefficient to determine whether there are statistically significant relationships between the color appearance factors and customer choice.

As the result of hypothesis 1 testing indicated, the correlation coefficient equaled to 86.1%, which is the highest value in the hypothesis testing. This finding is in keeping with a similar study conducted by Debby and Nelson (2006), which concluded that attitude toward color and product choice have a positive relationship. Attitude toward

color has also been associated with the color in store as shown by Joseph, Ayn and Hasty's study (2001).

The value of Hypothesis 2 is equals to 50.3%, which shows that there is a moderate and positive relationship between color of packaging and customer choice. This finding is in-keeping with the study of Khalid's (2005) which shows that color of packaging and customer choice have a moderately positive relationship. It suggests that the attractive packaging color can attract customer. Customer likes the colored packaging. It also implies that using attractive colors in packaging, marketers can grab customer attention.

As the result of hypothesis 3 testing indicated, the correlation coefficient equaled to 66.3%, which shows that there is a moderate and positive relationship between color of the main product and customer choice. This finding is in-keeping with the study of Geng, Yao and Ji's (2005) which show that color of the main product (product's original color) and customer choice have a moderately positive relationship.

As the result of hypothesis 4 testing indicated, the correlation coefficient equaled to 65%, which shows that there is a moderate and positive relationship between color of ambience and customer choice. This finding is in keeping with Joseph, Ayn, Crowley and Hasty (2001) who found that color is associated with physical attraction. Their study suggests that color can have a customer-drawing power as well as image-creating potential in retail store design.

The study failed to identify the influence of color of logo on customer choice. As the result of hypothesis 5 testing indicated, the correlation coefficient equaled to 7.8%, which shows that there is no relationship between color of logo and customer choice.

6.3 Conclusion

The results show that all null hypotheses are rejected, except color of logo. Although the color of the logo was not fully identified by the participants of the research, the significant contribution of other variables in explaining factors affecting customer choice of products in terms of color in Chengdu is still worthy high affirmation. Particularly, the significant influence of Chengdu customers' attitude toward color on customer choice was viewed as the most critical finding of this research, which concluded that the attitude toward color is positively influencing Chengdu customers' choice.

The colors of packaging and customer choice have a moderate and positive

relationship. This finding shows that color of packaging and customer choice has a moderately positive relationship. It suggests that the attractive packaging color can attract customer. Customer likes the colored packaging. It also implies that using attractive colors in packaging, marketers can grab customer attention.

In addition, another important finding in relation to customer choice is the color of the main product. It stood for more color of the main product saved, stronger customer choice would be. It suggests that the suitable ways to show the color of the main product can attract customer. It also implies that using suitable ways to present the colors of the main product, marketers can grab customer attention.

The third important finding of this research was the significant influence of color of ambience on Chengdu customers choice. Based on the findings of hypothesis testing, it was concluded that color of ambience had moderately positive influence on Chengdu customers' choice.

The study failed to identify the influence of color of logo on customer choice, which shows that there is no relationship between color of logo and customer choice. The finding concluded that if Chengdu customer intention to buy products, in terms of color, they are not likely to consider color of logo as one of the factors which may affect their choice. This finding might help marketers improve their brand logo recognition strategies.

6.4 Recommendations

Firstly, the findings of this study show that, manufacturers, marketers and other person concerned, should do the following to positively impact their customers' choice. They should design and make more marketable products so as to capture more customers and which should bring about increase profits. Satisfied customers would be willing to repeat shopping in the supermarkets, and introduce them to their friends and families by giving them positive information about it.

In order to be at every individual's best, an exclusive set of needs must be met. To be meet manufacturers and marketers should concern attitude information about the customer themselves as their data will affect customer choice as well as the manufacturers and marketers' ways of designing the color. So, manufacturers, marketers and any other person concerned should offer abundant choices color to customers, and provide competitive product prices. The ability to compare products

will allow customers to gain material benefits. From manufacturers' point of view, understanding this factor should be relevant to design and produce more marketable products and obtain prospective customers which should bring about increased profits.

Third, since the color of the main product cannot be used directly as such without any decoration, producers should confer them new kinds of colors. These colors should also be the means of attracting customers (Geng, Yao and Ji, 2005). This is especially important as nowadays the technical functionality of many products have almost reached into limits, they can no longer be distinguished by means of their functionality. Morever supermarkets contain thousands of products. One shelf will often display dozens of similar products. The color provides a first impression to customers. Under non-brand and non-habit purchase circumstances, appropriate, practical and aesthetic color will attract customers and increase the likelihood that they shop at the supermarket.

Fourth, it is also important for manufacturers, marketers and any other person concerned expand more efforts on the shopping ambience design and make shopping more enjoyable. The ambience in which a product is purchased could be significant and influential part of the entire product and may strongly influence product image and shopper behavior.

Lastly, the concept of color of logo should be explored to a greater extent, given that, this study shows that there is no relationship between color of logo and customer choice. The manufacturers, marketers and other person concerned should dedicate to convince customer with logo color recognition.

6.5 Future Studies

The generalizability of this research should be stretched to broader environmental settings in the future. To improve the regional limitation, the research was only conducted in urban areas of Chengdu; the research model developed should be applied in multiple cities of China, in urban, suburban and rural areas. According to National Bureau of Statistics of the People's Republic of China, China is a large agricultural country; the rural population is more than 745 million, accounting for 57% of Chinese population. So it is important to find out about rural customers. In addition, more research on color should be conducted to determine its strength as a factor in customer choice. Finally, to increase the theoretical and practical contribution of the model developed in this research, an examination of visible and specific products and brands are needed.

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APPENDIX A

QUESTIONNAIRE
(ENGLISH VERSION)

This survey is designed as graduate research by a student in the MBA program at Assumption University. The data will be used to test factors affecting customer choice of products in terms of color in Chengdu, China. This study will enable manufacturers, franchisers, marketers and other related persons to understand customer product selection related factors on the product color and that could help them to satisfy more customers and that will expand customer markets and increase awareness. If you have any questions or you would like to receive further information of this survey, please feel free to contact ccycfgrace@hotmail.com. As a precious customer, we will appreciate your co-operation.

Part 1: Screening Question

- Will you choose to purchase any product because of its color appearance?

  □ Yes   □ No   (If "No", please end this questionnaire.)

Part 2: Three different factors of product color appearance statement

Please indicate the degree of your agreement about the following statements in relation to the following product appearance color related factors.

1= strongly disagree   2= disagree

3= neither disagree nor agree

4= agree   5= strongly agree

Variables	Strongly disagree < --> Strongly agree
Attitude Toward Color	
1. I believe the product value will change when the color of the product changes.	1 2 3 4 5
2. Color is a key aspect for me to distinguish similar products.	1 2 3 4 5
3. Successful color matching can lead me to buy the product.	1 2 3 4 5

Variables	Strongly disagree < --> Strongly agree
Color of Packaging	
4. Every successful product has a successful color of packaging.	1 2 3 4 5
5. The color of packaging should reflect the product theme.	1 2 3 4 5
6. The color of packaging is one of the key aspects that attracted me to buy the product.	1 2 3 4 5

Variables	Strongly disagree < --> Strongly agree
Color of the Main Product	
7. I pay much attention to the color of the main product.	1 2 3 4 5
8. I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color.	1 2 3 4 5
9. When it comes to certain color, I will associate it to certain main product immediately.	1 2 3 4 5

Variables	Strongly disagree < - - > Strongly agree				
Color of Ambience					
10. Ambience and color matching are closely related.	1	2	3	4	5
11. Color of ambience need to cater to color of product.	1	2	3	4	5
12. The appropriate color of ambience can lead me to buy the product.	1	2	3	4	5

Variables	Strongly disagree < - - > Strongly agree				
Color of Logo					
13. Logo and color matching are closely related.	1	2	3	4	5
14. The color of logo can help me to distinguish similar products.	1	2	3	4	5
15. The color of logo is an aspect that attracted me to buy the product.	1	2	3	4	5

Part 3: Customer choice

Variables	Strongly disagree < - - > Strongly agree				
Customer Choice					
16. If the color appeals to me, I will buy the product with that color.	1	2	3	4	5
17. If the color appeals to me, I will recommend my relatives and friends to buy the product with that color.	1	2	3	4	5
18. If the color appeals to me, I will point out the positive aspects if somebody criticizes them.	1	2	3	4	5

Part 4: Personal Information

19. Age:

□ 18-25 years old   □ 26-35 years old   □ 36-45 years old

□ More than 45 years old

20. Gender:

□ Male   □ Female

21. Marital Status:

□ Single   □ Married

22. Educational Level:

□ below Bachelor's Degree   □ Bachelor's Degree

□ Master's Degree   □ Doctoral Degree

23. Occupation:

□ Governmental Officer   □ Business Employee

□ Entrepreneur   □ Others

24. Monthly Income:

□ Less than 1,000 Yuan   □ 1,001-2,000 Yuan

□ 2, 001 - 3,000 Yuan   □ 3,001 - 4,000 Yuan

□ 4,001 Yuan and above

25. Frequency of supermarkets shopping per month

□ Less than 1 time   □ 1 - 5 times

□ 6 – 10 times   □ More than 10 times

Thank you for your co-operation!

APPENDIX B

QUESTIONNAIRE

(CHINESE VERSION)

本调查问卷是易三仓大学 MBA 学生关于产品颜色外观和客户选择研究调查的一部分。这项研究将特别使制造商，经销商，营销人员和其他有关人士了解更多关于产品颜色外观在客户产品选择过程中的作用，能够帮助他们更好的满足客户，拓展客户市场。所有答案都是匿名并且保密的，不会用于其他目的。如果您有任何问题或者想在研究结束后了解此项研究所取得的成果，请您发邮件到 ccycfgrace@hotmail.com. 非常感谢您的参与！

问卷填写方法：请您选择最符合您的一项，并在方框或数字上划勾。

第一部分： 筛选问题

您会因为颜色而选择购买产品么？

    □   会   □   不会

（如果不会，请您终止填写此问卷，谢谢！）

第二部分：产品颜色外观影响因素

请您指出对下表满意度因素的看法，从强烈不同意到强烈同意。

1 = 强烈不同意强 **2** = 不同意   **3** = 既不同意也不反对

4 = 同意   **5** = 强烈同意

个人对颜色的态度	强烈不同意< -- >强烈同意				
1. 我认为产品能通过改变颜色而改变其本身价值。	1	2	3	4	5
2. 产品的颜色是我区分其他同类产品的关键因素。	1	2	3	4	5
3. 成功的颜色搭配能促使我购买该产品。	1	2	3	4	5

包装颜色	强烈不同意< -- >强烈同意				
1. 每一个成功产品都有一个成功的包装颜色。	1	2	3	4	5
2. 产品的包装颜色需要体现产品的主题。	1	2	3	4	5
3. 产品的包装颜色是吸引我购买的主要因素之一。	1	2	3	4	5

产品本身的颜色	强烈不同意< -- >强烈同意				
7. 我很重视产品的本身颜色。	1	2	3	4	5
8. 我会拒绝购买产品，如果其包装颜色与本身颜色相差过大。	1	2	3	4	5
9. 一提到一些特定的本身颜色，我就会马上联想到相关产品。	1	2	3	4	5

氛围颜色	强烈不同意< -- >强烈同意				
13. 氛围与颜色搭配息息相关。	1	2	3	4	5
14. 氛围颜色需要迎合产品颜色。	1	2	3	4	5
15. 合适的氛围颜色能吸引我购买产品。	1	2	3	4	5

商标颜色	强烈不同意< -- >强烈同意				
13. 商标与颜色搭配息息相关。	1	2	3	4	5
14. 商标颜色能便于我区分其他同类产品。	1	2	3	4	5
15. 商标颜色是吸引我购买的因素之一。	1	2	3	4	5
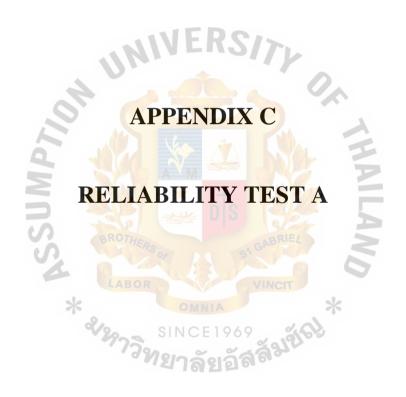
第三部分： 顾客选择

顾客选择	强烈不同意< -- >强烈同意				
16. 若某种颜色吸引我，我会选择购买有此颜色的产品。	1	2	3	4	5

17. 若某种颜色吸引我，我会推荐我的亲人和朋友购买它。	1 2 3 4 5
18. 若某种颜色吸引我，而有人批评它，我会指出它的优点。	1 2 3 4 5

第四部分： 个人信息

19. 年龄:　　　☐ 18-25 岁　　　☐ 26-35 岁　　　☐ 36-45 岁　　　☐ 45 岁以上

20. 性别:　　　☐ 男　　　　　☐ 女

21. 婚姻状况:　☐单身　　　　　☐ 已婚

22. 学历:　　　☐ 本科以下　　　☐ 本科
　　　　　　　☐ 研究生硕士　　☐ 研究生博士

23. 职业:　　　☐ 公务员　　　　☐ 企业雇员
　　　　　　　☐ 自主创业　　　☐ 其他

24. 月收入:　☐ 1,000 元以下　　　　　☐ 1,001-2,000 元
　　　　　　☐ 2,001- 3,000 元　　　　☐ 3,001 - 4,000 元
　　　　　　☐ 4,001 元及以上

25. 每月超市购物的频率:

　　　　　☐ 少于 1　　　　　☐ 1 - 5 次
　　　　　☐ 6 – 10 次　　　　☐ 10 次以上

谢谢您的合作！

APPENDIX C

RELIABILITY TEST A

Reliability Analysis – Scale (ALPHA)

a. Attitude Toward color

Reliability Statistics

Cronbach's Alpha	N of Items
.750	3

b. Color of Packaging

Reliability Statistics

Cronbach's Alpha	N of Items
.698	3

c. Color of the Main Product

Reliability Statistics

Cronbach's Alpha	N of Items
.679	3

d. Color of Ambience

Reliability Statistics

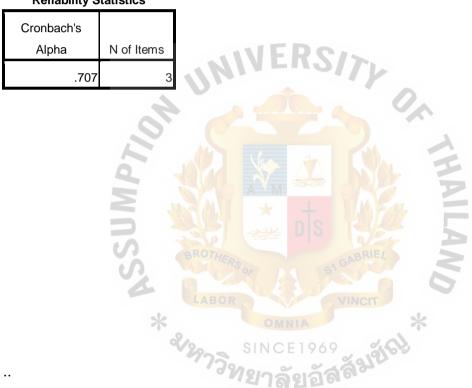| Cronbach's Alpha	N of Items
.905	3

e. Color of Logo

Reliability Statistics

Cronbach's Alpha	N of Items
.673	3

f. Customer choice

Reliability Statistics

Cronbach's Alpha	N of Items
.707	3

..

APPENDIX D

DESCRIPTIVE ANALYSIS OF

DEMEORGRAPIC FACTORS

Statistics

age
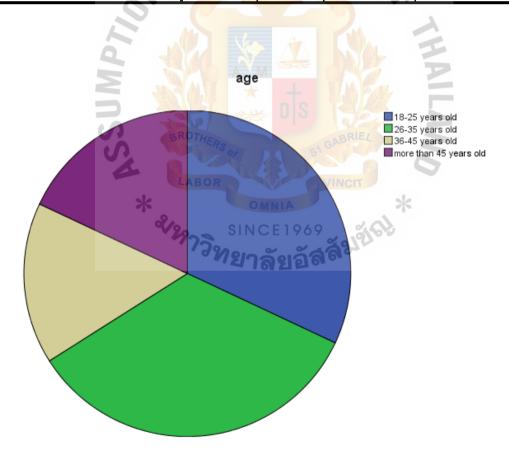
N	Valid	600
	Missing	0

age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 years old	192	32.0	32.0	32.0
	26-35 years old	204	34.0	34.0	66.0
	36-45 years old	96	16.0	16.0	82.0
	more than 45 years old	108	18.0	18.0	100.0
	Total	600	100.0	100.0	

age

Statistics
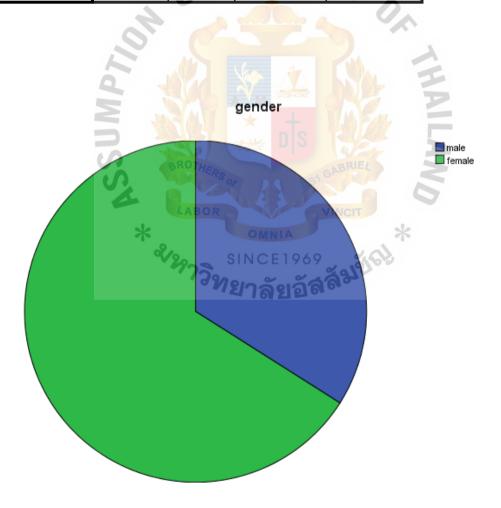
gender

N	Valid	600
	Missing	0

gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	204	34.0	34.0	34.0
	female	396	66.0	66.0	100.0
	Total	600	100.0	100.0	

gender

Statistics
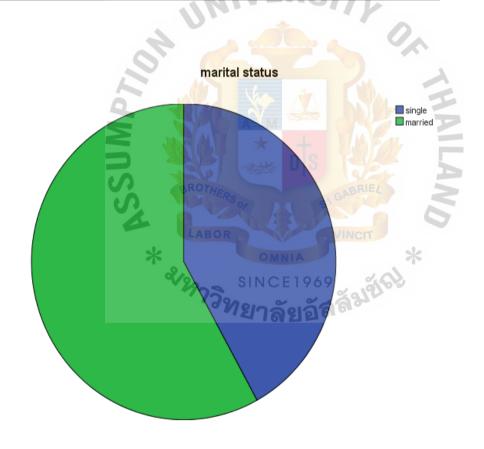
marital status

N	Valid	600
	Missing	0

marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	252	42.0	42.0	42.0
	married	348	58.0	58.0	100.0
	Total	600	100.0	100.0	

marital status
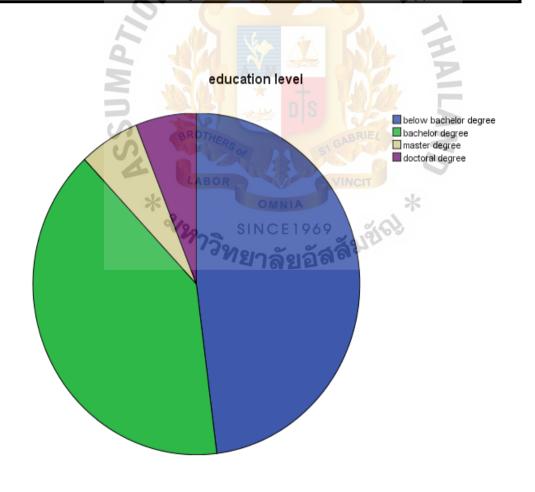
education level

N	Valid	600
	Missing	0

education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below bachelor degree	288	48.0	48.0	48.0
	bachelor degree	240	40.0	40.0	88.0
	master degree	36	6.0	6.0	94.0
	doctoral degree	36	6.0	6.0	100.0
	Total	600	100.0	100.0	

education level

- below bachelor degree
- bachelor degree
- master degree
- doctoral degree
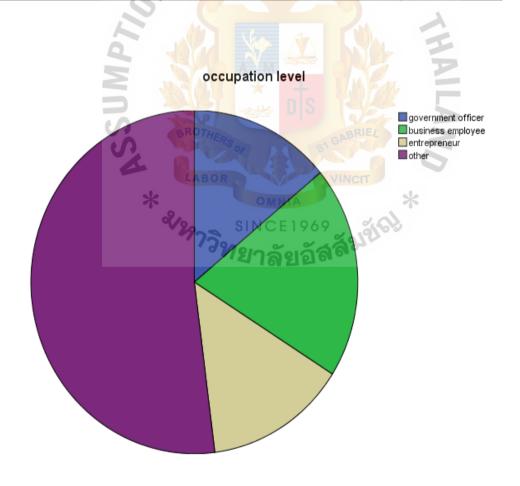
occupation level

N	Valid	600
	Missing	0

occupation level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	government officer	84	14.0	14.0	14.0
	business employee	120	20.0	20.0	34.0
	entrepreneur	84	14.0	14.0	48.0
	other	312	52.0	52.0	100.0
	Total	600	100.0	100.0	

occupation level

94
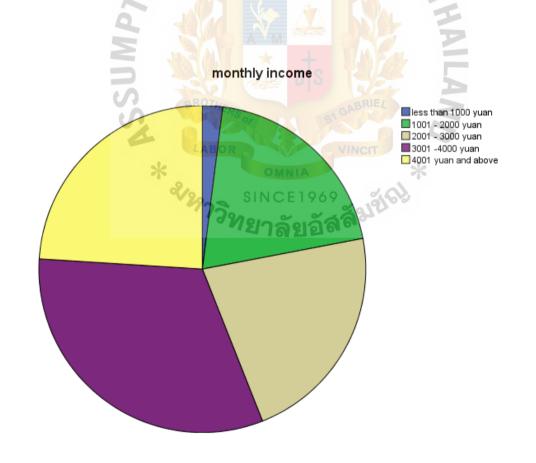
monthly income

N	Valid	600
	Missing	0

monthly income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1000 yuan	12	2.0	2.0	2.0
	1001 - 2000 yuan	120	20.0	20.0	22.0
	2001 - 3000 yuan	132	22.0	22.0	44.0
	3001 -4000 yuan	192	32.0	32.0	76.0
	4001 yuan and above	144	24.0	24.0	100.0
	Total	600	100.0	100.0	

monthly income
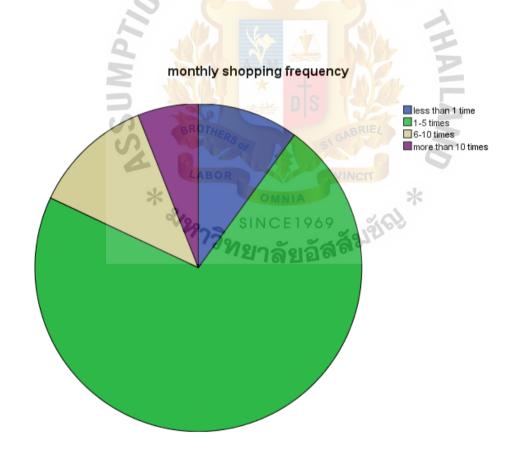
monthly shopping frequency

N	Valid	600
	Missing	0

monthly shopping frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1 time	60	10.0	10.0	10.0
	1-5 times	432	72.0	72.0	82.0
	6-10 times	72	12.0	12.0	94.0
	more than 10 times	36	6.0	6.0	100.0
	Total	600	100.0	100.0	

monthly shopping frequency

- less than 1 time
- 1-5 times
- 6-10 times
- more than 10 times

APPENDIX E

RELIABILITY TEST B
(PRETEST FOR 600 RESPONDENTS)

Reliability Analysis – Scale (ALPHA)

a. Attitude Toward color

Reliability Statistics

Cronbach's Alpha	N of Items
.672	3

b. Color of Packaging

Reliability Statistics

Cronbach's Alpha	N of Items
.663	3

c. Color of the Main Product

Reliability Statistics

Cronbach's Alpha	N of Items
.610	3

d. Color of Ambience

Reliability Statistics
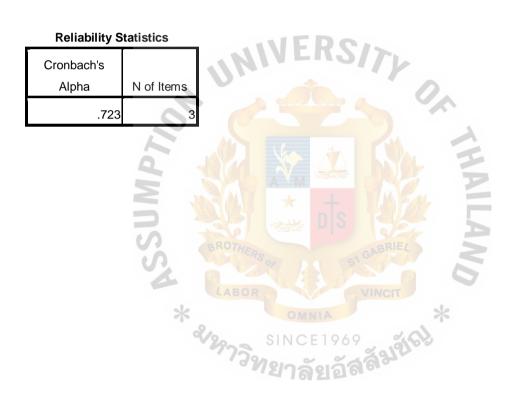
Cronbach's Alpha	N of Items
.775	3

e. Color of Logo

Reliability Statistics

Cronbach's Alpha	N of Items
.602	3

f. Customer choice

Reliability Statistics

Cronbach's Alpha	N of Items
.723	3

APPENDIX F

DESCRIPTIVE ANALYSIS OF VARIABLES
(FOR 600 RESPONDENTS)

a. Mean and Standard Deviation of Attitude toward Color

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I believe the product value will change when the color of the product changes.	600	3	5	4.00	.347
Color is a key aspect for me to distinguish similar products.	600	3	5	3.90	.459
Successful color matching can lead me to buy the product.	600	3	5	4.80	.530
Valid N (listwise)	600				

b. Mean and Standard Deviation of Color of Packaging

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Every successful product has a successful color of packaging.	600	2	5	4.02	.679
The color of packaging should reflect the product theme.	600	1	5	4.12	.841
The color of packaging is one of the key aspects that attracted me to buy the product.	600	3	5	4.36	.819
Valid N (listwise)	600				

c. Mean and Standard Deviation of Color of the Main Product

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I pay much attention to the color of the main product.	600	3	5	4.00	.448
I will refuse to purchase the product, if there is too great a disparity between the color of the main product and the packaging color.	600	2	5	3.94	.676
When it comes to certain color, I will associate it to certain main product immediately.	600	3	5	4.60	.693
Valid N (listwise)	600				

d. Mean and Standard Deviation of Color of Ambience

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ambience and color matching are closely related.	600	2	5	3.96	.489
Color of ambience need to cater to color of product.	600	2	5	3.94	.646
The appropriate color of ambience can lead me to buy the product.	600	2	5	4.72	.695
Valid N (listwise)	600				

e. Mean and Standard Deviation of Color of Logo

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Logo and color matching are closely related.	600	2	5	4.24	.650
The color of logo can help me to distinguish similar products.	600	3	5	4.48	.575
The color of logo is a key aspect that attracted me to buy the product	600	3	5	4.44	.638
Valid N (listwise)	600				

f. Mean and Standard Deviation of Customer Choice

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
If the color appeals to me, I will buy the product with that color.	600	3	5	4.00	.347
If the color appeals to me, I will recommend my relatives and friends to buy the product with that color.	600	3	5	3.96	.446
If the color appeals to me, I will point out the positive aspects if somebody criticizes them.	600	3	5	4.82	.518
Valid N (listwise)	600				

APPENDIX G
INFERENTIAL STATISTICS OF
HYPOTHESIS TESTING
(FOR 600 RESPONDENTS)

a. Pearson Correlation for Attitude Toward Color and Customer Choice

Correlations

		ATC	CC
ATC	Pearson Correlation	1	.861**
	Sig. (2-tailed)		.000
	N	600	600
CC	Pearson Correlation	.861**	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

b. Pearson Correlation for Color of Packaging and Customer Choice

Correlations

		COP	CC
COP	Pearson Correlation	1	.503**
	Sig. (2-tailed)		.000
	N	600	600
CC	Pearson Correlation	.503**	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

c. Pearson Correlation for Color of the Main Product and Customer Choice

Correlations

		COMP	CC
COMP	Pearson Correlation	1	.663**
	Sig. (2-tailed)		.000
	N	600	600
CC	Pearson Correlation	.663**	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

d. Pearson Correlation for Color of Ambience and Customer Choice

Correlations

		COA	CC
COA	Pearson Correlation	1	.650**
	Sig. (2-tailed)		.000
	N	600	600
CC	Pearson Correlation	.650**	1
	Sig. (2-tailed)	.000	
	N	600	600

**. Correlation is significant at the 0.01 level (2-tailed).

e. Pearson Correlation for Color of Logo and Customer Choice

Correlations

		COL	CC
COL	Pearson Correlation	1	.078
	Sig. (2-tailed)		.057
	N	600	600
CC	Pearson Correlation	.078	1
	Sig. (2-tailed)	.057	
	N	600	600