STUDY OF VISUAL PACKING DESIGN, PERCEIVED QUALITY, AND PERCEIVED VALUE OF ORGANIC FOODS ON BRAND PREFERENCE OF YOUNG CHINESE CONSUMERS

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ABSTRACT

The purpose of this research is to study about the relationship among Chinese young consumers' attitudes toward visual packaging design of organic food product, their perceived quality of organic food product, their perceived value of organic food product, and their brand preferences of organic food product. The data was collected from 385 questionnaires from 18-30 year-old respondents, collected from four biggest Chinese cities Beijing, Shanghai, Guangzhou, and Shenzhen. This research uses quantitative research, include using descriptive statistics to show biographic data of respondents and their purchase behavior of organic food products, and using simple linear regression and multiple linear regression to test hypothesis.

The descriptive statistics of demographic data showed that the majority respondents are female, most respondents are 23-26 years old, most respondents have bachelor's degree, most respondents' occupation is student, and most respondents have monthly income under 3,000 Yuan. The descriptive statistics of purchase behavior showed that most respondents purchase organic food product 2-4 times per month or ≤ 1 time per month, the most frequently purchased organic food products

are organic agricultural product and organic milk product, most respondents spent less than 100 Yuan for each purchase, most respondents purchase from supermarket, and that most respondents sometimes will choose same brand, sometimes will choose different brands.

The hypothesis testing results showed that for Chinese young consumers, attitude toward visual packaging design linearly affect perceived quality of organic food, attitude toward visual packaging design linearly affect brand preference of organic food, perceived quality linearly affect perceived value of organic food, perceived quality linearly affect brand preference of organic food, perceived value linearly affect brand preference of organic food, and also showed that attitude toward visual packaging design, perceived quality and perceived value jointly linearly affect brand preference of organic food.

Keywords: Organic Food, Visual Packaging Design, Perceived Quality, Perceived Value, Brand Preferences

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Organic foods are believed to be healthier, taste more natural, contain less chemical substances, have no risk from genetic engineering, and more environmental friendly.

In the past 18 years of the 21st century, there were more than 30 serious food safety incidents in China, including "Poisonous Jinhua ham event (in which some ham producing companies add illegal poisonous pesticide called dichlorvos into the ham to prevent maggots bred)", "Sudan I red dye event (in which KFC restaurant in China was found to illegally add Sudan I red dye to its New Orleans Roasted Wing product to make the chicken wings look more tasting)", "Turbot fish event (in which some farmer feed high dose illegal veterinary drugs and antibiotics to turbo fish to prevent potential diseases) ", "Vegetables pesticide residue event", "Contaminated baby formula event", "Colored steamed bun event".

All of these food safety issues mentioned above have raised Chinese consumers' concern about daily food safety problems. In Chinese social platform Weibo, topics related to "Food Safety" has over 110 million view counts. At the same time, the severity of air pollution has raised Chinese people's concern about their own health. Nowadays, Chinese people spend more and more money for their health, healthcare

spending per head increase from 161 US$ in year 2008 to 660 US$ in year 2017 (The Economist Intelligence Unit, 2018).

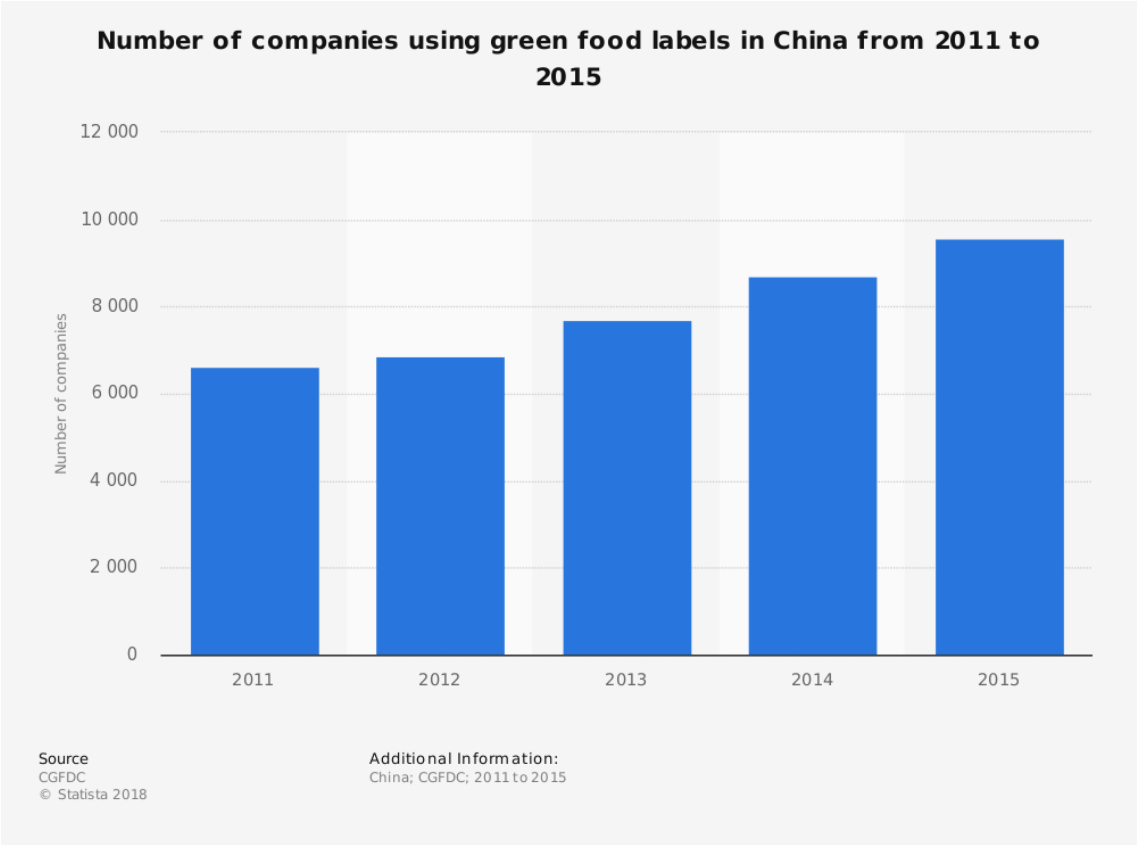

Figure 1: Statista (2016) Number of companies using green food labels in China from 2011 to 2015 (Statista, 2016)

We can also see from figure 1 that more and more Chinese food producing companies start to enter the organic food industry to satisfy customer demands due to food safety problems mentioned above.

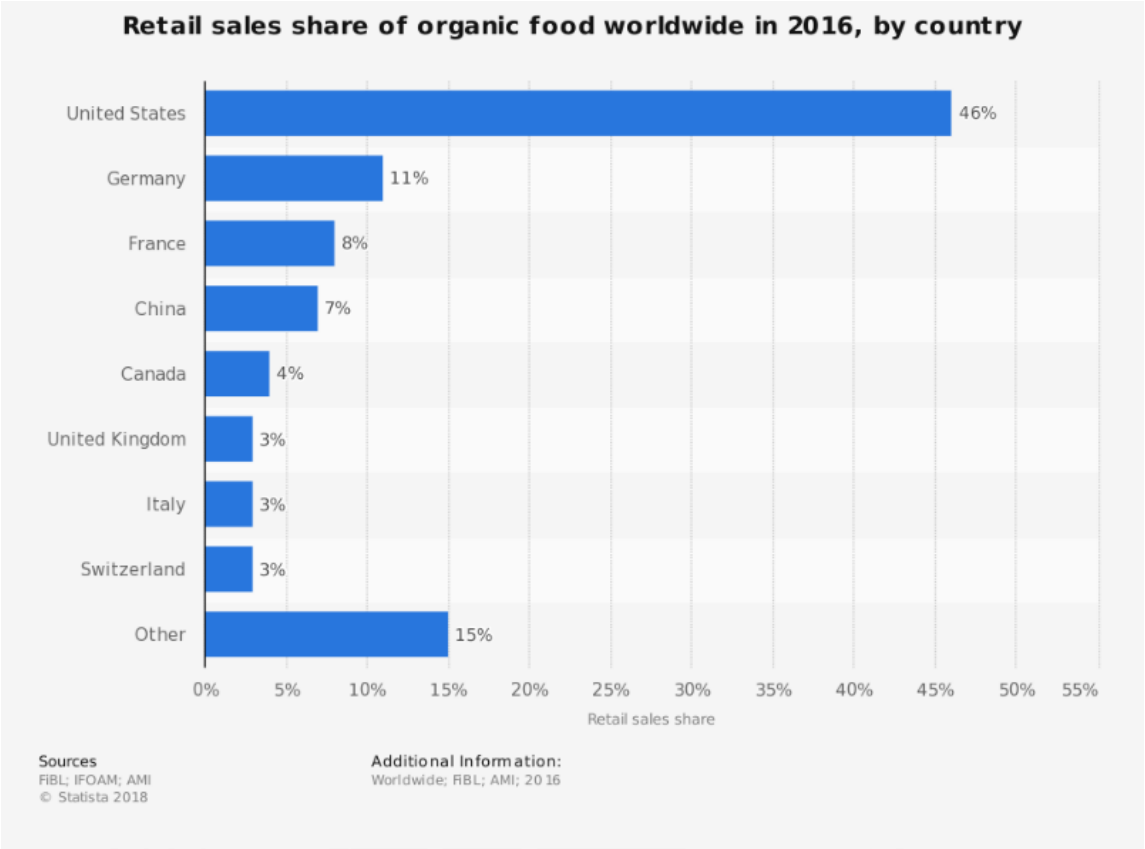

Figure 2: Retail sales share of organic food worldwide in 2016 by country (Statista, 2018)

In the present, Chinese people take about 18.5% of total world population, while Chinese people consume only about 7% share (see Figure 2) of organic food worldwide. Although ranked 4th in the world, there is still great market potential for Chinese organic food producers to explore.

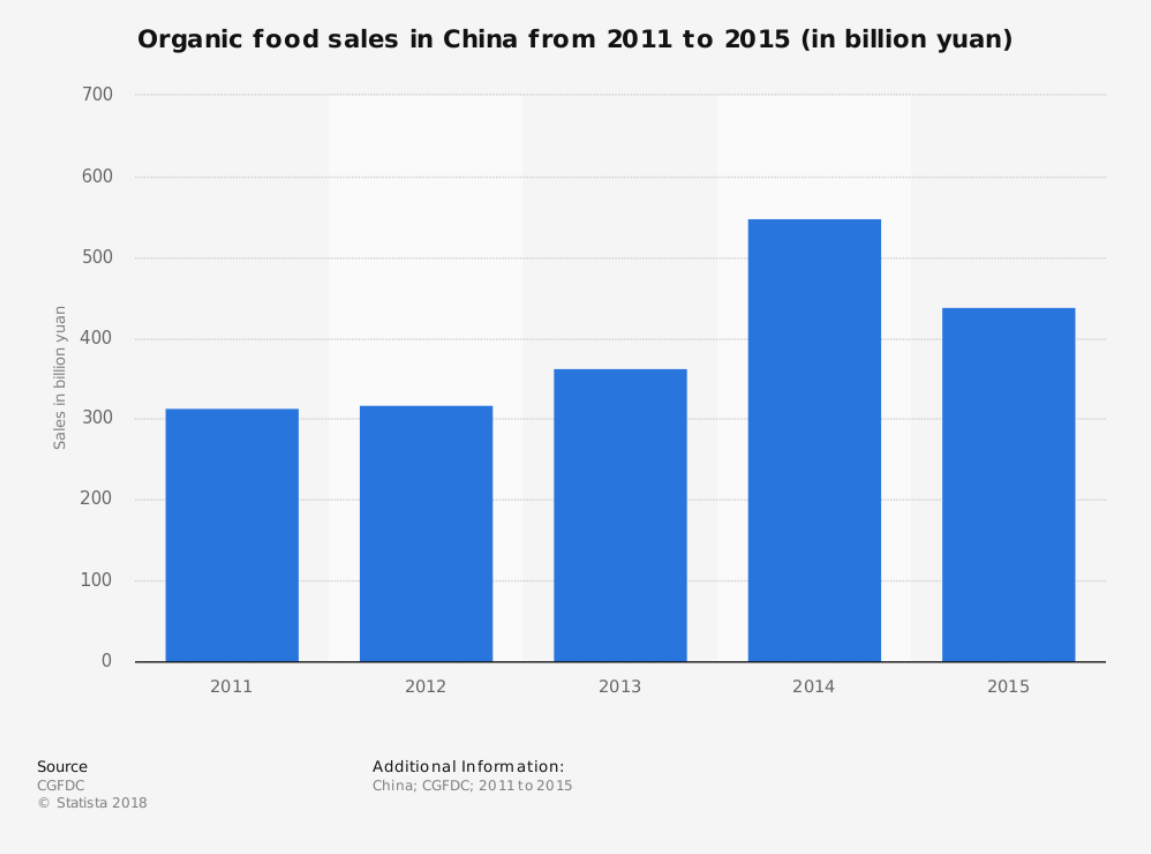

Figure 3: Organic food sales in China from 2011 to 2015 (in billion yuan) (Statista, 2016)

As shown in figure 3, organic food sales in China are generally in an increasing trend, and the market size already exceeded 400 billion yuan (about 62 billion US dollar) in 2014 and 2015. From the three figures shown above, it's clear for both food producers and consumers that the topic of organic food become more and more important for Chinese people's life.

Organic foods in China means all agricultural and sideline products that produced by organic farming methods, comply with organic standards, and should be certified by certification authority. Generally, organic foods use no pesticide,

chemical fertilizer, growth regulator, antibiotic and genetic engineering technology in the production process. (Gao, 2002)

There are many organic food types including organic agricultural products (organic cereals, organic fruits, organic vegetables), organic tea products, organic edible mushroom products, organic livestock and poultry products, organic aquatic products, organic bee products, organic milk powder, collected wild products, and processed products which use raw materials mentioned above. According to International Trade Center (2011), the main organic foods sold in Chinese markets include organic vegetable, organic fruits, organic grain, organic beans, organic tea, organic livestock, organic aquaculture, and organic processed foods.

Food packaging means packaging for food products. The functions of food packaging include protection, containment, information function, marketing, and convenience.

According to Hannele, Richard, and Bylon Abeeku (2012), important packaging design elements include verbal cues (brand name, manufacturer, origin place) and visual cues (shape, color, material, letter font).

1.2 Statement of Problems

The market potential for organic food in China is huge. According to CNCA (2014), by the end of year 2013, certified organic production area in China reached 2.722 million hectare, there are 7,894 organic product producers, 6,628 organic production bases, 3,910 organic processing plants. The issued organic product

certificates accumulated to 10 thousand. The annual organic product sales reached about 20-30 billion CNY (3.06-4.59 billion USD).

According to Wyrwa and Barska (2017), to use traditional promotion tools alone is not sufficient for attracting modern consumers. Consumers made 73% purchasing decisions at the point of sale, and 90% consumers bought products after only examining the pack front (Connolly & Davison, 1996). Before experience the product, consumers are first exposed to the packaging of the product (Orth & Marchi, 2007). Since on average consumers buy just 0.7 percent of all available products in a supermarket in one year time (Catalina, 2014), and the opportunity to sample products is rare, so consumers must judge the likely taste of food products from the packaging of the product and its branding (Simmonds & Spence, 2017). Informed consumers will get knowledge about food from various available sources and compare with the information from the label of food products (Bialkova, Sasse, & Fenko, 2016), as a result, it's important to investigate consumers' attitudes toward information on food packaging (Wyrwa & Barska, 2017). Attractive product packaging (especially visual product packaging) is important for product display and consumers' purchase decision (Ghani & Kamal, 2010). Packaging design provides product category information, it can help a product to position a within a category (Ampuero & Vila, 2006), it can communicate information about brand value and brand identity (Schoormans, den Berge, van de Laar, & van den Berg-Weitzel, 2010), and it's an effective tool for differentiating products in a crowded market place (Chandon, 2013).

For food products, according to Van Ooijen, Fransen, Verlegh, and Smit (2017) , packaging design affects quality related inferences independently from explicit

attribute information (such as price or brand). Package design elements (such as on-package graphics) did affect consumers' brand preferences for products (Westerman et al., 2013). Perceived food products quality is positively related to perceived food value (Konuk, 2018). Perceived product quality affects perceived value because it provides value in several ways (Vantamay, 2007). Perceived food product quality also directly and indirectly affects brand preference (Wang, 2013), the indirect effect is mediated by perceived value (Konuk, 2018). Therefore, to research about how packaging will affect consumer's purchase decision of organic foods, the author uses the above-mentioned factors in this study as variables, including consumer's attitude toward visual packaging design, perceived quality of organic food, perceived value of organic food, and brand preference for organic food.

1.3 Purposes of Study

1. To study how Chinese young consumers' attitudes toward visual packaging affect their perceived quality of organic food.

2. To study how Chinese young consumers' attitudes toward visual packaging affect their brand preferences of organic food.

3. To study how Chinese young consumers' perceived quality affect their perceived value of organic food.

4. To study how Chinese young consumers' perceived quality affect their brand preferences of organic food.

5. To study how Chinese young consumers' perceived value affect their brand preferences of organic food.

6. To study how Chinese young consumers' attitudes toward visual packaging, perceived quality, perceived value jointly affect their brand preferences of organic food.

1.4 Importance of Study

The result of the study will help scholars to gain more understanding about how visual packaging design, perceived quality, perceived value, and brand preference of organic food interact with each other. It will help existing organic food brands to look for opportunities to differentiate their products among others by package, to redesign their package to affect customer's perceived quality, perceived value, and obtain advantages in brand preference over competitors. It will also help potential foreign organic food brands which want to export to Chinese markets to gain better understanding of Chinese organic food markets and realize the importance of packaging design in their first step.

1.5 Limitation of Research

The respondents in this study are young Chinese consumers, so the result may not be applicable to consumers of other age groups or consumers in other countries. Gender differences among consumers are not considered in this research, different genders respond differently to communication efforts (Nysveen, Pedersen, &

Thorbjørnsen, 2005). The questionnaires were collected in October 2018, so social and market changes after that time were not reflected in the research. The results of this research is only applicable to operational variables relating to organic food product, not applicable to the general definitions of those variables.

1.6 Definition of Terms

a. Visual Packaging Design

Visual cues of packaging design elements, include shape, color, material, letter font, logo, graphic, etc. (Hannele et al., 2012)

b. Perceived Quality

Consumer's subjective opinion about a product's or service's overall ability to fulfill the consumer's expectations.

c. Perceived Value

Perceived value is how much worth the customer feel and believe about a product or service.

d. Brand Preference

Brand preference means which brand will consumer choose when competing brands exist.

CHAPTER 2

LITERATURE REVIEW

2.1 The Theoretical Foundation

The following concepts, theories and related literatures support the main conceptual framework of this study. There are 4 concepts including:

a. Concept on Packaging

b. Concept on Perceived Quality

c. Concept on Perceived Value

d. Concept on Brand Preference

2.2 Packaging Concept

Packaging is the science, technology and art to protect and contain products in order to store, to distribute, to sell, and to use (NIIR, 2008). Food packaging combined from food processing, food science, and food preservation. In society nowadays, food packaging include major functions including protecting the food from outside conditions, containing and enclosing the food for transportation purpose, and providing information to consumers (Trinetta, 2016).

According to Hannele et al. (2012), important packaging design elements include verbal cues and visual cues. Important visual cues include:

a. Colors

Color is people's feeling of light through their eyes, brains and life experience. Color has three characteristics, hue, brightness, and saturability. According to Kim, Spence, and Marshall (2018), by using unique colors to present option-related product information, marketers can influence consumers' choices, and this factor is not influenced by the options' performance characteristics.

According to Jin (2004), because of the difference in customs, geographical environment, mode of thinking, religious belief and national psychology, people living in different countries perceive the same color in different ways, the same color would have different cultural meaning in different countries.

1. Red color has strong visual stimulation and can make people feel lively. In Chinese culture, red color is associated with good luck and celebration, so it's a common color used for festival and celebration.

2. Yellow color, the color of sun, is a bright color and can make people feel sprightly. But in Chinese culture, yellow color is also associated with vulgar interest, rotten to core and declining, and also associated with pornographic.

3. Blue is a cold color, which make people feel calm and rational. In Chinese culture, blue is not associated with sad and aloneness as in western cultures. Blue is the color of the sky and the sea, which make people feel clean and pure.

4. Green is the color of nature, it can make people feel peaceful and healthy. But green is also the color of immature fruit, which can make people feel sour and bitter.

In modern Chinese language among young people, “green” also means someone is cheated by his or her partner, which convey a bad feeling to people.

5. Black color is taboo color in many cultures. In Chinese culture, black color is associated with crime and death as in western cultures.

6. White color in western cultures generally convey the meaning of purity and innocence. But the meaning of white color is not so favorable in traditional Chinese culture because Chinese people wear white mourning dress in funeral.

Since different colors give people different psychological and physiological effects, designer should be careful about which color and color combination to choose for product packaging, to influence consumers’ healthiness perception about food products (Karnal, Machiels, Orth, & Mai, 2016). For organic foods packaging, designers should choose colors to make the product looks healthy and nature, but also looks tasty.

b. Typeface

A typeface is a set of one or more fonts each composed of glyphs that share common design features. Chinese characters have 6 major typeface catogories, “Song typeface”, “Zhuan” (Seal script), “Kai” (Standard script), “Li” (Prison writing), “Cao” (Grass writing), “Xing” (The running hand).

According to Bauermeister (1988), typefaces can be categorize by eight features including genre, serif, weight, topology, contrast, angle, tool kind, and aspect ratio. Among them, genre, serif, tool kind, and aspect ratio have great effect on people’s

emotion (Chuang, Ma, & Feng, 2010). Typeface design is an important tool for companies to communicate with consumers (Childers & Jass, 2002). According to (Li, Qin, Zhang, Wu, & Zhou, 2015), people do have preferences for typefaces of Chinese characters. According to Velasco, Hyndman, and Spence (2018), certain typeface features influence people's perception of taste and taste rating about food products.

Typeface in this research is referred to Chinese typefaces used in organic food packaging including "Song", "Zhuan", "Kai", "Li", "Cao". and "xing", written in different genre, serif, weight, topology, contrast, angle, tool kind, and aspect ratio, and with different design styles.

c. Logos and labels

A logo is a graphic mark or symbol that is used to promote public recognition. It's a symbol or other small design that an organization used for the purpose of identifying its products, uniform, vehicles, etc. It can be in the form of an abstract or figurative design or it can include the text of the name that it represents. Brand logo designs have effects on brand awareness, aided recognition and consumer's buying intention (Chevalier & Mazzalovo, 2003). For non-prestigious food products, consumers intake more for those products which have a simple and flat logo, the opposite is true for prestigious food products (Bossel, Geyskens, & Goukens, 2018). According to Dong and Gleim (2018), the location of brand logo also affect consumers' purchase intention. Beside company logo, certification logos like organic food certification logo is also important in this research, the logo which is accredited

by China National Certification and Accreditation administration committee (CNCA). For a food product in Chinese markets to be called organic food product, it must be accredited by CNCA and print the “China Organic Product” logo in its package. Food products with organic label are perceived by consumers as better nutritional value and consumers have higher willingness to pay (Lee, Shimizu, Kniffin, & Wansink, 2013). There are also “QS certification logo” (Company food production certificate) and Halal logo that may affect consumers’ purchase decision. Logo in this research is referred to logo in organic food package, including brand logo, organic food certification logo, QS logo, Halal logo, etc.

d. Size

Size is the magnitude or dimensions of a thing, or how big something is. Size can be measured as length, width, height, diameter, perimeter, area, volume, or mass. For product packaging, different size will give consumers different impressions about the quality of the product through judgement about unit price (Yan, Sengupta, & Wyer, 2014). Size in this research referred to the size of package for organic food products in Chinese markets, include attribute like length, width, height, diameter, area, volume, mass, etc.

e. Graphics

Graphics are visual images or designs on some surface like wall, canvas, screen, paper, or stone to inform, illustrate, or entertain (Lutzker, 2002). Graphics often

combine text, illustration, and color. Graphics can be functional or artistic. Graphics types include photographs, line art, illustration, graphs, diagrams, maps, and computer graphic. Graphic is important to marketers because graphical representations have a significant and long-term effect on product beliefs and purchase intentions (Bone & France, 2001). Graphic in this research referred to graphic in organic food packaging in Chinese markets, including photographs, line art, illustration, graphs, diagrams, maps, and computer graphic, combined with text and color.

In this research, packaging refers to the science, technology and art to protect and contain organic food products, including elements which are supposed to affect consumer's purchase decision, such as the color used, the typeface chosen, the various logo and label selected, the size of the package chosen, and the graphics used.

2.3 Perceived Quality Concept

Quality is the totality of the characteristics and features from a product or from a service that contain its ability to satisfy needs, either it's stated or implied needs. Quality is an excellence measure, to measure how the products or services are away from deficiencies, defects and big variations (Diaz, 2014). It's a measure of suitability for intended purpose while satisfying customer expectations. It is perceptual, it has some subjective attribute and different people may understand it differently (Nanda, 2016).

Perceived quality is consumer's judgement about the overall excellence of a product, it's a higher level abstraction and it's not the same as objective quality (Zeithaml, 1988). Perceived quality is consumer's perception about the overall

superiority of the product or service in terms of its intended purposes, it's different from product-based quality and manufacturing quality (Aaker, 1991). Perceived quality may also include elements such as performance, reliability, features, durability, conformance, serviceability, and aesthetics (Vantamay, 2007).

In this research, perceived quality refers to how individual Chinese consumer evaluate if the characteristics and features of the organic food products satisfy his or her need and expectation about organic foods, if the organic food product is good enough in his or her personal perception and judgement. Individuals may make their quality judgement about if the product is superior, if quality is guaranteed, and the overall quality assessment, based on the factors including performance, reliability, features, durability, conformance, serviceability, and aesthetics.

2.4 Perceived Value Concept

Value is a term in commodity economy, it's the indistinctive human labor or abstract human labor that is embed in the commodity. The value of a commodity is determined by the socially necessary labor time that the commodity contains (Marx, 1911). Perceived value is how much worth the customer feel and believe about a product or service. Perceived value is the consumer's overall evaluation about the product utility based on the consumer's perception about what is given and what the consumer received, a ratio and trade-off between price and quality (Zeithaml, 1988). Retail customer is "value-driven", the higher the value, the more attractive the deal (Levy, 1999). Perceived value is the result of consumers' comparisons among different price structures which include advertised reference price, advertised selling

price, and internal reference price (Monroe, 2003). In purchasing decision process, perceived value of products will increases consumer's willingness to pay (De Medeiros, Ribeiro, & Cortimiglia, 2016).

Perceived value in this research refers to Chinese consumer's subjective overall evaluation of the utility of organic food products, based on consumer's perception on sale price acceptability, perceived worth, attractiveness of the deal, and overall value for money.

2.5 Brand Preference Concept

According to Dibb, Simkin, Pride, and Ferrell (2005), a brand is a name, term, design, symbol or any other feature which can identifies products from one seller to products from other sellers. Brands often provide the major points to differentiate between competitive products, therefore brands can be critical for business success (Lisa, 2000). Brands typically comprise various elements, such as name, logo, tagline, graphics, shapes, colors, sounds, scents and tastes. Brand preferences is the subjective tendencies which influence and make consumer to prone to a brand (Mohan Raj, 2016). Brand preference is a measure of loyalty of brand that a consumer will choose a particular brand over other competing brands. Brand preference can always receive marketer's attention because it's an essential step for understanding consumer choice behavior (Ebrahim, 2013).

Brand preference in this research refers to Chinese consumers' subjective tendency and loyalty toward an organic food brand when there are other brands available, which brand will they more likely to choose over others in their decision. Is

a brand perceived as better than others? Is it considered or used more than others? Is it preferred over others?

2.6 Related Research

Van Ooijen et al. (2017) study "Packaging design as an implicit communicator: Effects on product quality inferences in the presence of explicit quality cues" aimed to examine the interactive effect of packaging design and explicit packaging cues on quality inferences. That study examines how color value (lower value means darker color and higher value means lighter color) affects quality inferences about products. The authors of that article made assumption H1 that: Packaging color value acts as a cue for quality related product inferences, such that, compared to a higher value, a lower color value results in a higher quality perception and increases brand attitude. 53 participants joined that research and financial compensation was provided. The single factor between subjects experiment was color value (high vs. low). Participants indicated their expectations regarding product quality (either low or high) for two different products (crisps and coffee). One-way ANOVA method was used, with color value (low or high) as a between subjects factor. The result shows that lower color value (darker color) in packaging increases perceived quality of products. The result also shows that in general packaging design affects quality related inferences independently from explicit attribute information (i.e., price or brand). It's the first study that demonstrates how packaging design affects perceived product quality in the presence of explicit product information. It would provide valuable knowledge to brand strategist and packaging designers.

Magnier, Schoormans, and Mugge (2016) study "Judging a product by its cover: Packaging sustainability and perceptions of quality in food products" tested the influence of packaging sustainability on consumer's perceived food products quality, using two experiments featuring raisins, chocolate bars and coffee. The author of that research made three assumptions that: H1. The perceived quality of a food product will be more positive when the product is packed in a sustainable packaging than when it is packed in a conventional packaging. H2. Product sustainability will moderate the relationship between packaging sustainability and the perceived quality of a food product. H3. The perceived naturalness of the product will mediate the relationships between packaging and product sustainability and perceived quality for a food product. That research had 132 French respondents for online survey and use analysis of covariance ANCOVA to verify H1, with packaging sustainability as the independent variable and the perceived quality of the product as the dependent variable, and use ANOVA to verify H2, and use bootstrapping and PROCESS macro method to verify H3. The result showed that packaging sustainability positively influences the perceived quality of a food product and this effect is moderated by the sustainability of the product. The result also showed that the influence of the interaction of package and product sustainability on perceived quality is mediated by the perceived naturalness of the product.

Westerman et al. (2013) study "The design of consumer packaging: Effects of manipulations of shape, orientation, and alignment of graphical forms on consumers' assessments" researched about the effects of on-package graphics (shape angularity, orientation, left-right alignment) on consumers' brand preferences for products (water and vodka). 116 university students were recruited as participants. ANOVA method

was used for data analysis. The author made assumptions that products with packaging of rounded shape design, upward-oriented graphics, and left-aligned graphics would be preferred by consumers. The result showed that products with rounded shape in packaging design were preferred, and products with upward-oriented graphics in packaging design were preferred. But contrary to prediction, products with right-aligned graphics in packaging design were preferred by consumers. That research showed that package design elements (on-package graphics) did affect consumers' brand preferences for products.

Konuk (2018) study "The role of store image, perceived quality, trust and perceived value in predicting consumers' purchase intentions towards organic private label food" researched about on how store image (SI), perceived quality (PQ), trust in organic private label food products (OPL), and perceived value (PV) influence consumers' purchase intentions (PI) towards OPL food products. The author of that research made 10 assumptions, 4 among which need more attention: H4 PQ is positively related to PV, H6 PQ is positively related to PI, H8 PV is positively related to PI, and H9 the role of PQ on PI is mediated by PV. That author collected data from 352 effective questionnaires. The hypothesizes were tested with structural equations modeling using maximum-likelihood estimation. The results showed that perceived quality is positively related to perceived value, perceived quality is positively related to consumers' purchase intention, perceived value is positively related to purchase intention, and that the role of perceived quality on purchase intention is mediated by perceived value.

Wang (2013) study "The influence of visual packaging design on perceived food product quality, value, and brand preference" researched about how visual packaging affects consumers' subsequent product and brand evaluations and perceptions. Self-administered questionnaires from 315 undergraduate-student respondents were collected. To analyze data, the author of that research used descriptive statistics and confirmatory factor analysis. The results showed that attitudes toward visual packaging directly influence consumer-perceived food product quality and brand preference. Perceived food product quality also directly and indirectly (through product value) affects brand preference.

2.7 Hypothesis

H1: Attitude toward visual packaging design linearly affect perceived quality of organic food among young Chinese consumers.

H2: Attitude toward visual packaging design linearly affect brand preference of organic food among young Chinese consumers.

H3: Perceived quality linearly affect perceived value of organic food among young Chinese consumers.

H4: Perceived quality linearly affect brand preference of organic food among young Chinese consumers.

H5: Perceived value linearly affect brand preference of organic food among young Chinese consumers.

H6: Attitude toward visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food among young Chinese consumers.

2.8 Conceptual Framework

According to Van Ooijen et al. (2017) , packaging design affects quality related inferences independently from explicit attribute information (such as price or brand). Package design elements (such as on-package graphics) did affect consumers' brand preferences for products (Westerman et al., 2013). Perceived food products quality is positively related to perceived food value (Konuk, 2018). Perceived product quality affects perceived value because it provides value in several ways (Vantamay, 2007). Perceived food product quality also directly and indirectly affects brand preference (Wang, 2013), the indirect effect is mediated by perceived value (Konuk, 2018). Therefore, the following conceptual framework is developed after combining the theory in the supporting articles mentioned above.

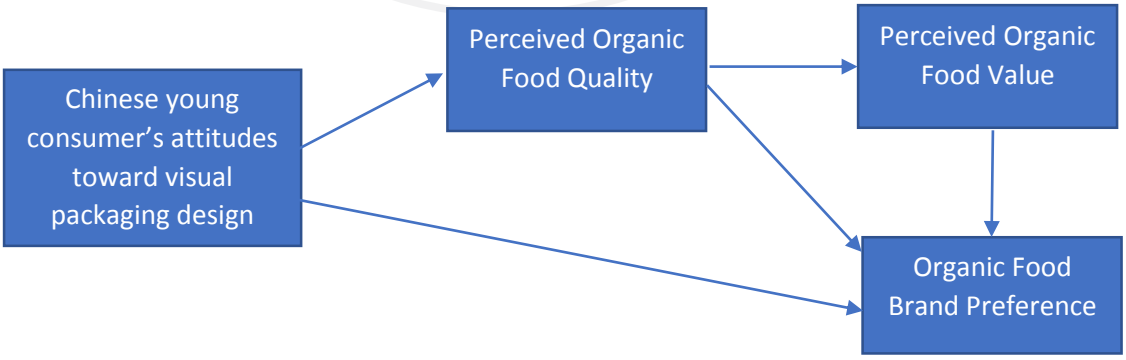

Figure 4: Conceptual Framework

CHAPTER 3

METHODOLOGY

The research methodology in this research was conducted as follows:

3.1 Research Method

The author firstly conducted a 40-sample pre-test to check the reliability of the survey questionnaire. Then, the author collected the actual data from 385 survey questionnaires. After that, the author conducted quantitative analysis by using statistical software to process and analyze data, to verify the hypothesis in this research.

3.2 Population and Sample

According to Yarlagadda, Murthy, and Krishna Prasad (2015), people who are 15-30 years old are considered as young adult. But since most people under 18 years old have no income because they are not allowed to work by The Labor Law of China, therefore, the author consider only 18-30 year-old consumers in China as the research population. But since researches about young adult consumers of organic food in China still remain blank, the author's justification for researching young adult consumers come from researches about western country markets. According to Von Essen and Englander (2013), it's a growing trend for young adults in western countries to choose organic diet. Younger adults in the U.S. are more likely to believe organic foods as better for health (Funk & Kennedy, 2016). Austrian teenagers and young adults are especially interested in organic foods, and younger consumers are more willing to pay a premium for organic products (Askew, 2018). By observing and researching the behavior of these young adult consumers, we will also have a better understanding about future trend in consumer behavior of organic food products, because when these young adults grow older and become the mainstay of the society, they will be the major consumers in the society.

For sample size calculation, the author use the sample size formula developed by Cochran (1953), set 0.95 as confidence level and 0.05 as the margin of error:

$$n = \frac{p(1-p) * z^2}{e^2}$$

n means Required sample size

p means Population proportion picking a choice (0.5)

z means Z value (1.96 for 95% confidence level)

e means Margin of error (0.05)

$$n = \frac{0.5(1-0.5) * 1.96^2}{0.05^2} = 384.16$$

Therefore, the author used the minimum sample size of 385 samples. Besides, the author did a pre-test of 40 samples by distribute the questionnaires to 40 Chinese students in Bangkok University by convenience sampling.

3.3 Questionnaire Structure

The researcher divided questionnaire into six parts.

Part 1. Researcher asked about Personal Information by using multiple choices for the following questions:

1) Gender (Nominal Scale)

2) Age (Ordinal Scale)

3) Highest Education (Ordinal Scale)

4) Current Occupation (Nominal Scale)

5) Monthly Income (Ordinal Scale)

Part 2. Researcher asked questions about Consumer Behavior by using multiple choices for the following questions:

1) How often do you purchase organic food products? (Ordinal Scale)

2) What type of organic food products did you buy or want to buy? (Can choose more than one choice) (Nominal Scale)

3) How much money you spent each time when you buy organic food? (Ordinal Scale)

4) Through which of the following channel did you mostly often buy organic food products? (Nominal Scale)

5) You always choose the same brand that you familiar with, or you would like to try other brands? (Ordinal Scale)

Part 3. Researcher use five-level likert scale to ask questions about respondent's attitudes toward visual packaging design, base on the respondent's most recent impression about the organic food product.

1) Color of organic food packaging is good. (Ordinal Scale)

2) Typeface in organic food packaging is suitable. (Ordinal Scale)

3) Logos in organic food packaging are satisfactory. (Ordinal Scale)

4) Size of organic food packaging is suitable. (Ordinal Scale)

5) Graphics in organic food packaging are interesting. (Ordinal Scale)

Part 4. Researcher use five-level likert scale to ask questions about respondent's perceived organic food quality, base on the respondent's most recent impression about the organic food product.

1) The quality of the organic food is superior. (Ordinal Scale)

2) The quality of the organic food is guaranteed. (Ordinal Scale)

3) The overall quality of the organic food is good. (Ordinal Scale)

Part 5. Researcher use five-level likert scale to ask questions about respondent's perceived organic food value, base on the respondent's most recent impression about the organic food product.

1) Sale price of the organic food is acceptable. (Ordinal Scale)

2) The perceived worth of the organic food is high. (Ordinal Scale)

3) The deal is attractive. (Ordinal Scale)

4) The overall value for money is high. (Ordinal Scale)

Part 6. Researcher use five-level likert scale to ask questions about respondent's organic food brand preference, base on the respondent's most recent impression about the organic food product.

1) The organic food brand is better than other brands. (Ordinal Scale)

2) You will consider or use more of this organic food brand than other brands. (Ordinal Scale)

3) You prefer this organic food brand over other brands. (Ordinal Scale)

For part 3 to part 6, data from different questions from each part was averaged for each part, then the author defined the range of level for the mean score as the following table:

Table 3.1.1: Range of level for mean score for Part 3 to Part6 data

Mean Score	Level
1.00-1.80	Strongly Disagree
1.81-2.60	Disagree
2.61-3.40	Neutral
3.41-4.20	Agree
4.21-5.00	Strongly Agree

3.4 Data Collection

Researcher collected data by the following processes:

1. Researcher studied the questionnaire design and data collection process of similar researches that can be helpful and contribute to creating appropriate questionnaire for this research.

2. The researcher designed the questionnaire and distributed to sampling populations as paper format questionnaires. According to Xu (2017), the majority consumers of organic foods in China live in big cities. Therefore, the researcher have 4 friends to help distribute the total 385 questionnaires in the street of Beijing city, Shanghai City, Guangzhou City and Shenzhen City, which are biggest and most-advanced four cities of China by common sense. Besides, the author did a pre-test of

40 samples by distribute the questionnaires to 40 Chinese students in Bangkok University by convenience sampling.

3. The time period to collect the 385 questionnaires from respondents was in early October 2018. The pre-test was conducted in the middle of August 2018.

3.5 Reliability Analysis

In this research, Cronbach's Alpha model was adopted as the method to measure reliability, and the researcher used reliability of 0.7 as acceptable minimum threshold to save time and effort according to Nunnally (1978). The researcher performed reliability analysis on statistical software for both pre-test data of 40 samples and actual data of 385 samples, with Cronbach's Alpha that must not less than 0.7, and the result showed as the following:

Table 3.2.1: Cronbach's Alpha of 40 samples pre-test data 385 samples actual data

Scale	Pre-test 40 samples	Actual data 385 samples	N of Items
	Cronbach's Alpha (Standardized Items)	Cronbach's Alpha (Standardized Items)	
Attitudes toward visual packaging design	0.851	0.830	5
Perceived organic food quality	0.872	0.863	3

(Continued)

Table 3.2.1 (Continued): Cronbach's Alpha of 40 samples pre-test data 385 samples actual data

Perceived organic food value	0.745	0.725	4
Organic food brand preference	0.791	0.796	3

As table 3.2.1 shows, all four scales for the pre-test have Cronbach's Alpha values higher than 0.7 threshold (Nunnally, 1978), thus, the pre-test data passed the reliability test. All four scales for actual data of 385 samples have Cronbach's Alpha values higher than 0.7 threshold (Nunnally, 1978), thus, actual data of 385 samples passed the reliability test.

3.6 Data Processing and Analysis

For the purpose of doing regression analysis for the ordinal-scale liker-scale data in the questionnaire part 3 – part 6, the researcher averaged the likert-scale points for each of part 3- part 6, then the researcher perform regression analysis from these averaged figures to study the various causal relationships in the hypothesis.

The analysis was performed using the following statistical tools to analyze the data in this study:

1. Descriptive statistics to present some insights about the personal information of respondents (gender, age, highest education, occupation, monthly income) and purchase behavior of respondents (purchase frequency, product type, shelf life choice, money spent each time, purchase channel), and about respondent's attitude toward

visual packaging design, .perceived organic food quality, perceived organic food value, and brand preferences.

2. Simple Linear Regression to examine each of hypothesis H1, H2, H3, H4, and H5. Simple linear regression is a linear regression model with a single explanatory variable, used to summarize and study relationships between two continuous (quantitative) variables.

3. Multiple Linear Regression to examine hypothesis H6. Multiple linear regression is a linear regression model with more than one explanatory variable, used to summarize and study relationships between one continuous dependent variable and two or more independent variables.

CHAPTER 4

RESEARCH FINDING AND DATA ANALYSIS

In this chapter, researcher presents the result of the research "Study of Visual Packaging Design, Perceived Quality, and Perceived Value of Organic Foods on Brand Preference of Young Chinese Consumers". The result of this research will be presented in 7 parts:

4.1 Analysis of Respondent's Personal Information

4.2 Analysis of Respondent's Purchase Behavior of Organic Food

4.3 Analysis of Respondent's Attitudes toward Visual Packaging Design

4.4 Analysis of Respondent's Perceived Organic Food Quality

4.5 Analysis of Respondent's Perceived Organic Food Value

4.6 Analysis of Respondent's Organic Food Brand Preference

4.7 Analysis of Hypothesis Testing

4.1 Analysis of Respondent's Personal Information

The analysis of respondent's personal information includes gender, age, education, occupation, and monthly income. The frequency and percentage are shown as follows:

Table 4.1.1: Frequency and Percentage of Respondent's Personal Information: Gender

Respondent's Personal Information	Frequency	Percentage
1. Gender		
Male	167	43.4
Female	218	56.6
Total	385	100

From table 4.1.1, there are 167 male respondents and 218 female respondents, accounted for 43.4% and 56.6% respectively. More female respondents than male respondents in this sample.

Table 4.1.2: Frequency and Percentage of Respondent's Personal Information: Age

Respondent's Personal Information	Frequency	Percentage
2. Age		
18-22	135	35.1
23-26	182	47.3
27-30	68	17.7
Total	385	100

From table 4.1.2, most respondents are 23-26 years old, accounted for 47.3%, followed by 18-22 years old (35.1%) and 27-30 years old (17.7%).

Table 4.1.3: Frequency and Percentage of Respondent's Personal Information: Education

Respondent's Personal Information	Frequency	Percentage
3. Education		
High School	32	8.3
Bachelor' Degree	278	72.2
Master's Degree or Higher	75	19.5
Total	385	100

From table 4.1.3, the majority of respondents have bachelor's degree, accounted for 72.2%, followed by respondents who have master's degree 19.5%, and respondents who only have high school diploma 8.3%.

Table 4.1.4: Frequency and Percentage of Respondent's Personal Information: Occupation

Respondent's Personal Information	Frequency	Percentage
4. Occupation		
Student	202	52.5
Government Official	16	4.2
Company Employee	127	33.0
Self Employed	40	10.4
Housewife/House Husband	0	0
Others	0	0

(Continued)

Table 4.1.4 (Continued): Frequency and Percentage of Respondent's Personal Information: Occupation

Total	385	100

From table 4.1.4, student (52.5%) accounted for the highest percentage among respondents, followed by company employee (33.0%), self-employed (10.4%), and government official (4.2%). No respondents defined themself as housewife/house husband or other occupations that were no listed.

Table 4.1.5: Frequency and Percentage of Respondent's Personal Information: Monthly Income

Respondent's Personal Information	Frequency	Percentage
5. Monthly Income		
Under 3,000 Yuan	190	49.4
3,001-6,000 Yuan	67	17.4
6,001-9,000 Yuan	78	20.3
Higher Than 9,000 Yuan	50	13.0
Total	385	100

From table 4.1.5, 49.4% of respondents have income under 3,000 yuan, the reason may be that 52.2% of respondents are students who normally have no income or low income. 20.3% of respondents have monthly income 6,001-9,000 yuan, followed by 17.4% respondents of 3,001-6,000 yuan, and 13.0% respondents of higher than 9,000 yuan.

4.2 Analysis of Respondent's Purchase Behavior of Organic Food

The analysis of respondent's purchase behavior includes purchase frequency, purchase types, spent level, purchase channel, and brand adherence. The frequency and percentage are shown as follows:

Table 4.2.1: Frequency and Percentage of Respondent's Purchase Behavior: Purchase Frequency

Respondent's Purchase Behavior	Frequency	Percentage
1. Purchase Frequency		
Never	50	13.0
≤1 Time Per Month	139	36.1
2-4 Times Per Month	142	36.9
5-12 Times Per Month	45	11.7
More Than12 Times Per Month	9	2.3
Total	385	100

From table 4.2.1, 50 respondents (13.0%) never purchase organic foods before, 139 respondents (36.1%) purchase 1 time or less per month, 142 respondents (36.9%) purchase 2-4 times per month, 45 respondents (11.7%) purchase 5-12 times per month, and 9 respondents (2.3%) purchase more than 12 times per month.

Table 4.2.2: Frequency and Percentage of Respondent's Purchase Behavior: Purchase Types

Respondent's Purchase Behavior	Frequency	Percentage
2. Purchase Types		
Organic Agricultural Product	329	85.5
Organic Tea Product	84	21.8
Organic Mushroom Product	55	14.3
Organic Livestock Product	62	16.1
Organic Aquatic Product	30	7.8
Organic Bee product	65	16.9
Organic Milk Product	161	41.8
Others	0	0

From table 4.2.2, for this multiple choice question about purchase types, 329 respondents (85.5%) would like to purchase organic agricultural product, which account for the highest among other types. 84 (21.8%) respondents would like to purchase organic tea product, 55 respondents (14.3%) would like to buy organic mushroom product, 62 respondents (16.1%) would like to buy organic livestock product, 30 respondents (7.8%) would like to purchase organic aquatic product, 65 respondents (16.9%) would like to purchase organic bee product, 161 respondents (41.8%) would like to purchase organic milk product, and no respondents choose others because probably all organic food product types that can be found in the market were already listed in the first seven options.

Table 4.2.3: Frequency and Percentage of Respondent's Purchase Behavior: Spent Level

Respondent's Purchase Behavior	Frequency	Percentage
3. Spent Level		
Less Than 100 Yuan	193	50.1
100-300 Yuan	178	46.2
Higher Than 300 Yuan	14	3.6
Total	385	100

From table 4.2.3, 193 respondents (50.1%) spent less than 100 yuan to purchase organic food per time, followed 178 respondents (46.2%) who spent 100-300 yuan per time, and 14 respondents (3.6%) who spent higher than 300 yuan per time.

Table 4.2.4: Frequency and Percentage of Respondent's Purchase Behavior: Purchase Channel

Respondent's Purchase Behavior	Frequency	Percentage
4. Purchase Channel		
Online Shopping	74	19.2
Supermarket	237	61.6
Convenience Store	18	4.7
Grocery	56	14.5
Others	0	0

(Continued)

Table 4.2.4 (Continued): Frequency and Percentage of Respondent's Purchase Behavior: Purchase Channel

Total	385	100

From table 4.2.4, most respondents (237) purchase organic food from supermarket, accounted for 61.6%, followed by 74 respondents (19.2%) who purchase from online shopping, 56 respondents (14.5%) who purchase from grocery, 18 respondents (4.7%) who purchase from convenience store, and no respondents purchase from other channel.

Table 4.2.5: Frequency and Percentage of Respondent's Purchase Behavior: Brand Adherence

Respondent's Purchase Behavior	Frequency	Percentage
5. Brand Adherence		
Always Same Brand	102	26.5
Sometimes Same, Sometimes Different	247	64.2
Always Different Brands	36	9.4
Total	385	100

From table 4.2.5, most respondents (247) sometimes purchase same brand sometimes purchase different brands, accounted for 64.2% in the sample, followed by 102 respondents (26.5%) who always purchase the same brand, and 36 respondents (9.4%) who always purchase different brands.

4.3 Analysis of Respondent's Attitudes Toward Visual Packaging Design

Table 4.3.1: Mean and Standard Deviation of Attitudes Toward Visual Packaging Design

Attitudes Toward Visual Packaging Design	Mean	S.D.	Level
1. Color of Organic Food Packaging is Good.	3.98	1.015	Agree
2. Typeface in Organic Food Packaging is Suitable.	3.94	0.853	Agree
3. Logos in Organic Food Packaging are Satisfactory.	3.92	0.956	Agree
4. Size of Organic Food Packaging is Suitable.	3.89	0.770	Agree
5. Graphics in Organic Food Packaging are Interesting.	3.55	1.115	Agree
Total	3.858	0.961	Agree

From table 4.3.1, in this sample the mean score for respondent's attitudes toward visual packaging design is 3.858. Among the variables, package color has the highest mean score 3.98, followed by package typeface 3.94, package logos 3.92, package size 3.89, and package graphics 3.55.

4.4 Analysis of Respondent's Perceived Organic Food Quality

Table 4.4.1: Mean and Standard Deviation of Perceived Organic Food Quality

Perceived Organic Food Quality	Mean	S.D.	Level

(Continued)

Table 4.4.1 (Continued): Mean and Standard Deviation of Perceived Organic Food Quality

1. The Quality of The Organic Food is Superior.	3.99	1.001	Agree
2. The Quality of The Organic Food is Guaranteed.	4.04	0.824	Agree
3. The Overall Quality of The Organic Food is Good.	4.18	0.713	Agree
Total	4.07	0.857	Agree

From table 4.4.1, in this sample the mean score for respondent's perceived organic food quality is 4.07. Among the variables, perceived overall quality has the highest mean score 4.18, followed by the perception that the quality is guaranteed 4.04, and the perception that the quality is superior 3.99.

4.5 Analysis of Respondent's Perceived Organic Food Value

Table 4.5.1: Mean and Standard Deviation of Perceived Organic Food Value

Perceived Organic Food Value	Mean	S.D.	Level
1. Sale Price of The Organic Food is Acceptable.	3.87	0.774	Agree
2. The Perceived Worth of The Organic Food is High.	3.74	0.874	Agree
3. The Deal is Attractive.	3.58	0.823	Agree
4. The Overall Value for Money is High.	3.83	0.892	Agree
Total	3.76	0.849	Agree

From table 4.5.1, in this sample the mean score for respondent's perceived organic food value is 3.76. Among the variables, price acceptability has the highest

mean score 3.87, followed by the perception about overall value for money 3.83, the perceived worth 3.74, and the perception that the deal is attractive 3.58.

4.6 Analysis of Respondent's Organic Food Brand Preference

Table 4.6.1: Mean and Standard Deviation of Organic Food Brand Preference

Organic Food Brand Preference	Mean	S.D.	Level
1. The organic food brand is better than other brands.	3.68	0.746	Agree
2. You will consider more of this brand than other brands.	3.62	0.867	Agree
3. You prefer this organic food brand over other brands.	3.86	0.887	Agree
Total	3.72	0.841	Agree

From table 4.6.1, in the sample the mean score for respondent's organic food brand preference is 3.72. Among the variables, the perception that the respondent prefer this brand over other brand has the highest mean score 3.86, followed by the perception that the brand is better than other brand 3.68, and the perception that the respondent would consider more of this brand than other brand 3.62.

4.7 Analysis of Hypothesis Testing

Simple linear regression analysis were conducted on mean value of each category for hypothesis H1, H2, H3, H4, H5, and multiple linear regression analysis was conducted on mean value for hypothesis H6. All analysis were based on level of significance α=5%.

4.7.1.

H0: Attitude toward visual packaging design has no linear relationship with perceived quality of organic food among young Chinese consumers.

H1: Attitude toward visual packaging design linearly affect perceived quality of organic food among young Chinese consumers.

Table 4.7.1: Hypothesis Testing Result of H1

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	1.896	0.173		10.982	0.000
Attitude visual package design	0.564	0.044	0.548	12.816	0.000
Adjusted R Square=0.298	R=0.548				

From table 4.7.1, for attitude toward visual packaging design, because t=12.816 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the null hypothesis, thus, attitude toward visual packaging design linearly affect perceived quality of organic food, and the linear relationship is neutral level (R=0.548). Adjusted R Square of 0.298 means that the variation in perceived quality of organic food that is explained by the variation in visual packaging design is only 29.8%, the other 70.2% is not explained. The coefficient B of visual packaging design 0.564 means that the linear relationship is positive, and means that regardless

of other factors, for each 1 unit increase in attitude visual packaging design score, the perceived quality score will increase by 0.564 unit.

4.7.2

H0: Attitude toward visual packaging design has no linear relationship with brand preference of organic food among young Chinese consumers.

H2: Attitude toward visual packaging design linearly affect brand preference of organic food among young Chinese consumers.

Table 4.7.2: Hypothesis Testing Result of H2

	Unstandardized Coefficients		Standardized Coefficients	t	Sig
Model	B	Std. Error	Beta		
(Constant)	2.373	0.180		13.161	0.000
Attitude visual package design	0.349	0.046	0.362	7.599	0.000
Adjusted R Square=0.129	R=0.362				

From table 4.7.2, for attitude toward visual packaging design, because t=7.599 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the null hypothesis, thus, visual packaging design linearly affect brand preference of organic food, and the linear relationship is weak (R=0.362).

Adjusted R Square of 0.129 means that the variation in brand preference of organic food that is explained by the variation in visual packaging design is only 12.9%, the other 87.1% is not explained. The coefficient B of visual packaging design 0.349 means that the linear relationship is positive, and means that regardless of other factors, for each 1 unit increase in visual packaging design score, the brand preference score will increase by 0.349 unit.

4.7.3

H0: Perceived quality has no linear relationship with perceived value of organic food among young Chinese consumers.

H3: Perceived quality linearly affect perceived value of organic food among young Chinese consumers.

Table 4.7.3: Hypothesis Testing Result of H3

	Unstandardized Coefficients		Standardized Coefficients	t	Sig
Model	B	Std. Error	Beta		
(Constant)	1.276	0.120		10.613	0.000
Perceived quality	0.609	0.029	0.731	20.956	0.000
Adjusted R Square=0.533	R=0.731				

From table 4.7.3, for perceived quality, because t=20.956 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the

null hypothesis, thus, perceived quality linearly affect perceived value of organic food, and the linear relationship is strong (R=0.731). Adjusted R Square of 0.533 means that the variation in perceived value of organic food that is explained by the variation in perceived quality is only 53.3%, the other 46.7% is not explained. The coefficient B of perceived quality 0.609 means that the linear relationship is positive, and means that regardless of other factors, for each 1 unit increase in perceived quality score, the perceived value score will increase by 0.609 unit.

4.7.4

H0: Perceived quality has no linear relationship with brand preference of organic food among young Chinese consumers.

H4: Perceived quality linearly affect brand preference of organic food among young Chinese consumers.

Table 4.7.4: Hypothesis Testing Result of H4

	Unstandardized Coefficients		Standardized Coefficients	t	Sig
Model	B	Std. Error	Beta		
(Constant)	1.013	0.140		7.253	0.000
Perceived quality	0.665	0.034	0.709	19.698	0.000
Adjusted R Square=0.502	R=0.709				

From table 4.7.4, for perceived quality, because t=19.698 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the null hypothesis, thus, perceived quality linearly affect brand preference of organic food, and the linear relationship is strong (R=0.709). Adjusted R Square of 0.502 means that the variation in brand preference of organic food that is explained by the variation in perceived quality is only 50.2%, the other 49.8% is not explained. The coefficient B of perceived quality 0.665 means that the linear relationship is positive, and means that regardless of other factors, for each 1 unit increase in perceived quality score, the brand preference score will increase by 0.665 unit.

4.7.5

H0: Perceived value has no linear relationship with brand preference of organic food among young Chinese consumers.

H5: Perceived value linearly affect brand preference of organic food among young Chinese consumers.

Table 4.7.5: Hypothesis Testing Result of H5

	Unstandardized Coefficients		Standardized Coefficients	t	Sig
Model	B	Std. Error	Beta		
(Constant)	0.468	0.140		3.351	0.001
Perceived value	0.866	0.037	0.770	23.601	0.000

(Continued)

Table 4.7.5 (Continued): Hypothesis Testing Result of H5

Adjusted R Square=0.591	R=0.770

From table 4.7.5, for perceived value, because t=23.601 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the null hypothesis, thus, perceived value linearly affect brand preference of organic food, and the linear relationship is strong (R=0.770). Adjusted R Square of 0.591 means that the variation in brand preference of organic food that is explained by the variation in perceived value is only 59.1%, the other 40.9% is not explained. The coefficient B of perceived value 0.866 means that the linear relationship is positive, and means that regardless of other factors, for each 1 unit increase in perceived value score, the brand preference score will increase by 0.866 unit.

4.7.6

H0: Attitude toward visual packaging design, perceived quality and perceived value have no linear relationship with brand preference of organic food among young Chinese consumers.

H6: Attitude toward visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food among young Chinese consumers.

Table 4.7.6: Hypothesis Testing Result of H6 (ANOVA)

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	123.187	3	41.062	234.414	0.000
Residual	66.740	381	0.175		
Total	189.926	384			

Table 4.7.7: Hypothesis Testing Result of H6 (Coefficients)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	0.397	0.143		2.784	0.006
Visual packaging design	-0.116	0.036	-0.120	-3.257	0.001
Perceived Quality	0.339	0.044	0.362	7.740	0.000
Perceived Value	0.636	0.051	0.566	12.510	0.000
Adjusted R Square=0.646	R=0.805				

From table 4.7.6, because F(3)=234.414 with p-value=0.000 which is less than significance level 0.05, we found sufficient evidence to reject the null hypothesis, thus, brand preference of organic food has linear relationship with at least one of the three independent variables. From table 4.7.7, for visual packaging design, t=-3.257

with p=0.001 which is less than significance level 0.05; for perceived quality, t=7.740 with p=0.000 which is less than significance level 0.05; for perceived value, t=12.510 with p=0.000 which is less than significance level 0.05. Thus, all three independent variables, visual packaging design, perceived quality, and perceived value linearly affect brand preference of organic food among young Chinese consumers, and the linear relationship is very strong (R=0.805).

Adjusted R Square of 0.646 means that the variation in brand preference of organic food that is explained by the variation in visual packaging design, perceived quality, and perceived value is only 64.6%, the other 35.4% is not explained.

The coefficient B of visual packaging design -0.116 means that the linear relationship between visual packaging design and brand preference is negative (contradict with positive B in H2 analysis, the reason is still unknown and need further research.), and means that regardless of perceived quality and perceived value, for each 1 unit increase in visual packaging design score, the brand preference score will decrease by 0.116 unit. The coefficient B of perceived quality 0.339 means that the linear relationship between perceived quality and brand preference is positive, and means that regardless of visual packaging design and perceived value, for each 1 unit increase in perceived quality score, the brand preference score will increase by 0.339 unit. The coefficient B of perceived value 0.636 means that the linear relationship between perceived value and brand preference is positive, and means that regardless of visual packaging design and perceived quality, for each 1 unit increase in perceived value score, the brand preference score will increase by 0.636 unit.

Table 4.7.8: Summary of Hypothesis Testing Results

Hypothesis	Testing Results of Hypothesis
H1: Attitude toward visual packaging design linearly affect perceived quality of organic food among young Chinese consumers.	Accepted
H2: Attitude toward visual packaging design linearly affect brand preference of organic food among young Chinese consumers.	Accepted
H3: Perceived quality linearly affect perceived value of organic food among young Chinese consumers.	Accepted
H4: Perceived quality linearly affect brand preference of organic food among young Chinese consumers.	Accepted
H5: Perceived value linearly affect brand preference of organic food among young Chinese consumers.	Accepted
H6: Attitude toward visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food among young Chinese consumers.	Accepted

A brief summary of the hypothesis testing results was shown above in table 4.7.8.

CHAPTER 5

CONCLUSION AND DISCUSSION

In this chapter, the researcher summarize all important information of the research "Study of Visual Packaging Design, Perceived Quality, and Perceived Value of Organic Foods on Brand Preference of Young Chinese Consumers", along with some discussions related to this research and future researches. This chapter will be presented in three parts:

5.1 Summary of Data Analysis Results and Theoretical Implications

5.2 Managerial Implications

5.3 Research Limitations and Recommendations for Future Research

5.1 Summary of Data Analysis Results and Theoretical Implications

5.1.1 The Analysis of Respondent's Personal Information

The majority respondents are those people who are female, who are 23-26 years old, who have bachelor's degree, whose occupation are students and thus have monthly income lower than 3,000 Yuan.

5.1.2 The Analysis of Respondent's Purchase Behavior of Organic Food Products

The majority of respondents buy organic foods 2-4 times per month. The major purchase types of organic foods are organic agricultural products and organic milk

products. The majority of respondents spent less than 100 Yuan for organic food each on time of purchase, and their major purchase channel is supermarket. About brand adherence, most respondents sometimes choose same brand, sometimes choose different brands.

5.1.3 The Analysis of Respondent's Attitudes toward Visual Packaging Design

Respondent's attitude toward visual packaging design have five aspects including color (agree level), typeface (agree level), logos (agree level), size (agree level), and graphics (agree level). The overall attitude toward visual packaging design of respondents is at agree level.

5.1.4 The Analysis of Respondent's Perceived Organic Food Quality

Respondent's perceived organic food quality has three aspects including superior quality (agree level), guaranteed quality (agree level), and overall quality (agree level), the respondent's overall perceived quality of organic food is at agree level.

5.1.5 The Analysis of Respondent's Perceived Organic Food Value

Respondent's perceived organic food value has four aspects including sale price acceptability (agree level), perceived worth (agree level), attractiveness of the deal (agree level) and overall value for money (agree level). The respondent's overall perceived value of organic food is at agree level.

5.1.6 The Analysis of Respondent's Organic Food Brand Preference

Respondent's organic food brand preference has three aspects including the believe that the organic food brand is better than other brands (agree level), the believe that the respondent will consider more of this brand than other brands (agree level), and

the believe that the respondent prefer this brand than other brands (agree level), The respondent's overall organic food brand preference is at agree level.

5.1.7 The Analysis of Hypothesis Testing and Theoretical Implications.

The simple linear regression analysis results support the alternative hypothesis H1 that attitude visual packaging design linearly affect perceived quality of organic food, it complies with the research finding of Van Ooijen et al. (2017), which examined the interactive effect of packaging design and explicit packaging cues on quality inferences, and showed that in general packaging design affects quality related inferences independently from explicit attribute information (such as price or brand).

The simple linear regression analysis results support the alternative hypothesis H2 that visual packaging design linearly affect brand preference of organic food, it complies with the research finding of Westerman et al. (2013), which researched about the effects of on-package graphics (shape angularity, orientation, left-right alignment) on consumers' brand preferences for products (water and vodka), and showed that products with rounded shape in packaging design were preferred, and products with upward-oriented graphics in packaging design were preferred, and that package design elements (on-package graphics) did affect consumers' brand preferences for products.

The simple linear regression analysis results support the alternative hypothesis H3 that perceived quality linearly affect perceived value of organic food, it complies with the research finding of Konuk (2018), which showed that perceived food quality is positively related to perceived value, perceived quality is positively related to

consumers' purchase intention, perceived value is positively related to purchase intention.

The simple linear regression analysis results support the alternative hypothesis H4 that perceived quality linearly affect brand preference of organic food, it complies with the research finding of Wang (2013), which researched about how visual packaging affects consumers' subsequent product and brand evaluations and perceptions, and showed in findings that perceived food product quality directly and indirectly affects brand preference.

The simple linear regression analysis results support the alternative hypothesis H5 that perceived value linearly affect brand preference of organic food, it complies with the research finding of (Konuk, 2018), which showed that the indirect effect of perceived quality on brand preference is mediated by perceived value.

The multiple linear regression analysis results support the alternative hypothesis H6 that visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food, it also complies with the previous studies mentioned above, but the contradictory negative Beta need further research to explain.

The result of the study will help scholars to gain more understanding about how visual packaging design will affect Chinese young consumers' purchase of organic food, how visual packaging design interact with perceived quality, perceived value, and brand preference of organic food.

5.2 Managerial Implications

This research will help Chinese organic food brands practitioner to get deeper understanding about how packaging design affects consumers' purchase through perceived quality, perceived value, and brand preference. It will help existing organic food brands practitioners to look for opportunities to differentiate their product among others by packaging, to redesign their package to affect customer's perceived quality, perceived value, and obtain advantages in brand preference over competitors. For the hypothesis testing of H1 "attitude toward visual packaging design linearly affect perceived quality of organic food", the result showed that attitude toward visual packaging design linearly affect perceived quality of organic food. For the hypothesis testing of H2 "attitude toward visual packaging design linearly affect brand preference of organic food", the result confirmed that attitude visual packaging design linearly affect brand preferences of organic food. Thus, practitioners should choose the appropriate combination of packaging color, typeface, logo, size, and graphics in order to increase customer's perceived quality and brand preferences of their products. For the hypothesis testing of H3 "perceived quality linearly affect perceived value of organic food", the result agreed that perceived quality linearly affect perceived value of organic food. For the hypothesis testing of H4 "perceived quality linearly affect brand preference of organic food", the results confirmed that perceived quality linearly affect brand preferences of organic food. Thus, practitioners should try to increase customer's perceived quality by three dimensions including "superior", "guaranteed", and "overall quality", in order to increase customer's perceived value and brand preferences of their products. For the hypothesis testing result of H5 "perceived value linearly affect brand preference of organic food among young Chinese consumers", the result agreed that perceived value linearly affect brand

preference of organic food. Thus, practitioners should try to increase customer's perceived value in dimensions such as "sale price acceptability", "perceived worth", "deal attractiveness", and "overall value for money", in order to increase customer's brand preferences of their products. For the hypothesis testing result of H6 "visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food among young Chinese consumers", the result also confirmed that visual packaging design, perceived quality and perceived value linearly affect brand preference of organic food. Thus, practitioner should try to improve visual packaging design, perceived quality and perceived value by dimensions mentioned above in order to increase brand preferences of their products.

This research will also help foreign organic food brands which want to export to Chinese markets to gain better understanding of Chinese organic food markets and realize the importance and relationship among packaging design, perceived quality, perceived value, and brand preferences in their first step.

5.3 Research Limitations and Recommendations for Future Research

The respondents in this study are young Chinese consumers, so the result may not be applicable to consumers in other countries. Gender differences among consumers are not considered in this research, gender can be added as moderator in future research, because according to Coley and Burgess (2003), male and female are significantly different in affective and cognitive processes when they are making impulse buying decisions of many product categories. The questionnaires were collected in October 2018, therefore social and market changes after that time were not reflected in the research. The results of this research is only applicable to

operational variables relating to organic food product, not applicable to the general definitions of those variables. Another limitation is that the respondents answer the survey questionnaires based only on their last impression about certain one organic food product that they have seen, there is lack of comparison among different products. Without comparison, it would be harder for respondents to answer questions clearly about the level of their perceived quality, perceived value, and preferences. Thus, another suggestion for future research is to do comparison research, to allow respondents to see and compare different real organic food products, and to rate the score of product packaging, perceived quality, perceived value, and brand preferences among different products. In that way, researches can gather better data to research about the relationship among packaging, perceived quality, perceived value, and brand preferences. Moreover, another limitation is that the author didn't conduct structural equation modelling, as a result, whether perceived quality and perceived value should be the mediators for brand preference in the conceptual framework is open to question. Therefore, the author suggest future researches to conduct structural equation modelling and that may help to find out the explanation for the contradictory negative Beta in hypothesis testing of H6.

BIBLIOGRAPHY

Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. New York: Jossey Bass.

Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of Consumer Marketing, 23*(2), 100-112. doi: 10.1108/07363760610655032

Askew, K. (2018). *Youth support for organics swells.* Retrieved from https://www.foodnavigator.com/Article/2018/01/18/Youth-support-for-organics-swells

Bauermeister, B. (1988). *A Manual of Comparative Typography*. New York: Van Nostrand Reinhold.

Bialkova, S., Sasse, L., & Fenko, A. (2016). The role of nutrition labels and advertising claims in altering consumers' evaluation and choice. *Appetite, 96,* 38-46. doi: https://doi.org/10.1016/j.appet.2015.08.030

Bone, P. F., & France, K. R. (2001). Package Graphics and Consumer Product Beliefs. *Journal of Business and Psychology, 15*(3), 467-489. doi: 10.1023/A:1007826818206

Bossel, V., Geyskens, K., & Goukens, C. (2018). Facing a Trend of Brand Logo Simplicity: The Impact of Brand Logo Design on Consumption. *Food Quality and Preference*. doi: https://doi.org/10.1016/j.foodqual.2018.06.009

Catalina. (2014). *Engaging the selective shopper.* Retrieved from https://www.catalina.com/insights/research-studies/engaging-the-selective-shopper/

Certification and Accreditation Administration of China. (2014). *China Organic Industry Development Report*. Beijing: Quality Inspection of China Press.

Chandon, P. (2013). How Package Design and Pankaged-based Marketing Claims Lead to Overeating. *Applied Economic Perspectives and Policy, 35*(1), 7-31.

Chevalier, M., & Mazzalovo, G. (2004). *Pro Logo: Brands as a Factor of Progress.* New York: Palgrave Macmillan.

Childers, T. L., & Jass, J. (2002). All Dressed Up With Something to Say: Effects of Typeface Semantic Associations on Brand Perceptions and Consumer Memory. *Journal of Consumer Psychology, 12*(2), 93-106. doi: https://doi.org/10.1207/S15327663JCP1202_03

Chuang, H., Ma, M., & Feng, Y. (2010). *The Features of Chinese Typeface and Its Emotion*. Paper presented at the International Conference on Kansei Engineering and Emotion Research 2010.

Cochran, W. G. (1953). *Sampling techniques*. Oxford: John Wiley.

Coley, A., & Burgess, B. (2003). Gender differences in cognitive and affective impulse buying. *Journal of Fashion Marketing and Management: An International Journal, 7*(3), 282-295. doi: doi:10.1108/13612020310484834

Connolly, A., & Davison, L. (1996). How does design affect decision at point of sale? *Journal of Brand Management, 4*(2), 100-107.

De Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2016). Influence of perceived value on purchasing decisions of green products in Brazil. *Journal of Cleaner Production, 110*, 158-169. doi: https://doi.org/10.1016/j.jclepro.2015.07.100

Dibb, S., Simkin, L., Pride, W. M., & Ferrell, O. C. (2005). *Marketing: Concepts and strategies.* London: Houghton Mifflin.

Dong, R., & Gleim, M. R. (2018). High or low: The impact of brand logo location on consumers product perceptions. *Food Quality and Preference, 69*, 28-35. doi: https://doi.org/10.1016/j.foodqual.2018.05.003

Ebrahim, R. S. (2013). *A Study of Brand Preference: An Experiential View.* (Doctor of Philosophy), Brunel Business School.

Funk, C., & Kennedy, B. (2016). The New Food Fights: U.S. Public Divides Over Food Science. U.S.: Pew Research Center.

Gao, Z. (2002). Organic Food in Developing and Organic Agriculture. *Environmental Protection, 2002*(5), 29-32.

Ghani, U., & Kamal, Y. (2010). The Impact of In-Store Stimuli on the Impulse Purchase Behaviour of Consumers in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 2*(8), 155-160.

Hannele, K. R., Richard, A. O., & Bylon Abeeku, B. (2012). Brand salience of OTC pharmaceuticals through package appearance. *International Journal of Pharmaceutical and Healthcare Marketing, 6*(3), 230-249. doi: 10.1108/17506121211259403

International Trade Center. (2011). Organic Food Products in China: Market Overview (pp. 5). Genava: ITC.

Jin, H. (2004). Colour Association In Different Culture. *Journal of Honghe University, 2*(4).

Karnal, N., Machiels, C. J. A., Orth, U. R., & Mai, R. (2016). Healthy by design, but only when in focus: Communicating non-verbal health cues through symbolic

meaning in packaging. *Food Quality and Preference, 52*, 106-119. doi: https://doi.org/10.1016/j.foodqual.2016.04.004

Kim, J., Spence, M. T., & Marshall, R. (2018). The Color of Choice: The Influence of Presenting Product Information in Color on the Compromise Effect. *Journal of Retailing, 94*(2), 167-185. doi: https://doi.org/10.1016/j.jretai.2018.01.002

Konuk, F. A. (2018). The role of store image, perceived quality, trust and perceived value in predicting consumers' purchase intentions towards organic private label food. *Journal of Retailing and Consumer Services, 43*, 304-310. doi: https://doi.org/10.1016/j.jretconser.2018.04.011

Lee, W., Shimizu, M., Kniffin, K. M., & Wansink, B. (2013). You taste what you see: Do organic labels bias taste perceptions? *Food Quality and Preference, 29*(1), 33-39. doi: https://doi.org/10.1016/j.foodqual.2013.01.010

Levy, M. (1999). Revolutionizing the Retail Pricing Game. *Discount Store News, 38*.

Li, R., Qin, R., Zhang, J., Wu, J., & Zhou, C. (2015). The esthetic preference of Chinese typefaces – An event-related potential study. *Brain Research, 1598*, 57-65. doi: https://doi.org/10.1016/j.brainres.2014.11.055

Lisa, W. (2000). Brands and brand equity: definition and management. *Management Decision, 38*(9), 662-669. doi: doi:10.1108/00251740010379100

Lutzker, A. (2002). *Content Rights for Creative Professionals, Copyrights and Trademarks in a Digital Age*. London: Routledge.

Magnier, L., Schoormans, J., & Mugge, R. (2016). Judging a product by its cover: Packaging sustainability and perceptions of quality in food products. *Food Quality and Preference, 53*, 132-142. doi: https://doi.org/10.1016/j.foodqual.2016.06.006

Marx, K. (1911). *Capital: Volume 1: A Critique of Political Economy.* London: Penguin Classics.

Mohan Raj, P. (2016). Brand Preferences Of Newspapers-Factor Analysis Approach. *Research Journal of Economics and Business Studies, 5*(11).

Monroe, K. B. (2003). *Pricing: Making Profitable Decisions*. New York: McGraw-Hill.

Nanda, V. (2016). *Quality Management System Handbook for Product Development Companies*. Boca Raton: CRC Press.

NIIR Board. (2008). *Food Packaging Technology Handbook*. Delhi: Niir Project Consultancy Services.

Nunnally, J. C. (1978). *Psychometric theory (2nd ed.)*. New York: McGraw-Hill.

Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005). Explaining intention to use mobile chat services: moderating effects of gender. *Journal of Consumer Marketing, 22*(5), 247-256. doi: doi:10.1108/07363760510611671

Orth, U. R., & Marchi, R. D. (2007). Understanding the Relationships Between Functional, Symbolic, and Experiential Brand Beliefs, Product Experiential Attributes, and Product Schema: Advertising-Trial Interactions Revisited. *Journal of Marketing Theory and Practice, 15*(3), 219-233.

Schoormans, J., den Berge, M. E.-v., van de Laar, G., & van den Berg-Weitzel, L. (2010). Designing Packages that Communicate Product Attributes and Brand Values: An Exploratory Method. *The Design Journal, 13*(1), 31-47. doi: 10.2752/146069210X12580336766329

Simmonds, G., & Spence, C. (2017). Thinking inside the box: How seeing products on, or through, the packaging influences consumer perceptions and purchase

behaviour. *Food Quality and Preference, 62*, 340-351. doi: https://doi.org/10.1016/j.foodqual.2016.11.010

Statista. (2016). Number of companies using green food labels in China from 2011 to 2015. Retrieved from https://www.statista.com/statistics/448056/number-of-companies-using-green-food-labels-in-china/

Statista. (2016). Organic food sales in China from 2011 to 2015 (in billion yuan). Retrieved from https://www.statista.com/statistics/448044/organic-food-sales-in-china/

Statista. (2018). Retail sales share of organic food worldwide in 2016, by country. Retrieved from https://www.statista.com/statistics/262347/worldwide-spending-on-organic-products-by-country/

The Economist Intelligence Unit. (2018). An assessment of the economic, political and healthcare outlook in China (pp. 31). U.S.: EUI.

Trinetta, V. (2016). Definition and Function of Food Packaging, *Reference Module in Food Science.* Amsterdam: Elsevier.

Van Ooijen, I., Fransen, M. L., Verlegh, P. W. J., & Smit, E. G. (2017). Packaging design as an implicit communicator: Effects on product quality inferences in the presence of explicit quality cues. *Food Quality and Preference, 62*, 71-79. doi: https://doi.org/10.1016/j.foodqual.2017.06.007

Vantamay, S. (2007). Understanding of perceived product quality: Reviews and recommendations. *BU Academic Review, 6*(1), 110-117.

Velasco, C., Hyndman, S., & Spence, C. (2018). The role of typeface curvilinearity on taste expectations and perception. *International Journal of Gastronomy and Food Science, 11*, 63-74. doi: https://doi.org/10.1016/j.ijgfs.2017.11.007

Von Essen, E., & Englander, M. (2013). Organic food as a healthy lifestyle: A phenomenological psychological analysis. *International Journal of Qualitative Studies on Health and Well-being, 8*(1), 20559. doi: 10.3402/qhw.v8i0.20559

Wang, E. (2013). The influence of visual packaging design on perceived food product quality, value, and brand preference. *International Journal of Retail & Distribution Management, 41*(10), 805-816. doi: 10.1108/IJRDM-12-2012-0113

Westerman, S. J., Sutherland, E. J., Gardner, P. H., Baig, N., Critchley, C., Hickey, C., . . . Zervos, Z. (2013). The design of consumer packaging: Effects of manipulations of shape, orientation, and alignment of graphical forms on consumers' assessments. *Food Quality and Preference, 27*(1), 8-17. doi: https://doi.org/10.1016/j.foodqual.2012.05.007

Wyrwa, J., & Barska, A. (2017). Packaging as a Source of Information About Food Products. *Procedia Engineering, 182,* 770-779. doi: https://doi.org/10.1016/j.proeng.2017.03.199

Xu, W. (2017). *Study on the consumption behaviour of organic food.* (Doctoral Doctoral dissertation), Northwest Agriculture & Forestry University.

Yan, D., Sengupta, J., & Wyer, R. S. (2014). Package size and perceived quality: The intervening role of unit price perceptions. *Journal of Consumer Psychology, 24*(1), 4-17.

Yarlagadda, A., Murthy, J. V. R., & Krishna Prasad, M. H. M. (2015). A novel method for human age group classification based on Correlation Fractal Dimension of facial edges. *Journal of King Saud University - Computer and*

Information Sciences, 27(4), 468-476. doi: https://doi.org/10.1016/j.jksuci.2014.10.005

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of marketing*, 2-22.

APPENDIX

Survey Questionnaire

Study of Visual Packaging Design, Perceived Quality, and Perceived Value of Organic Foods on Brand Preference of Young Chinese Consumers

This questionnaire is part of the Independent Studies of graduate students at Bangkok University in Master Degree of Business Administration. In order to collect data for the study, the researcher would like to invite you to answer the questionnaire in your most truthful way. Data from this questionnaire will be kept confidential and will only be used in this research.

Thank you for answering this questionnaire.

Mr. Weidong Lin

Graduate student of Bangkok University

Part 1: Personal Information

Instruction: Please mark ✓ in ☐ for the most possible answer

1. Gender

☐ 1) Male ☐ 2) Female

2. Age

☐ 1) 18 - 22 ☐ 2) 23 - 26

☐ 3) 27 - 30

3. Highest Education

☐ 1) High School/ Diploma ☐ 2) Bachelor Degree

☐ 3) Master Degree or Higher

4. Current Occupation

☐ 1) Student ☐ 2) Government Official

☐ 3) Company Employee ☐ 4) Self Employed

☐ 5) Housewife/House husband ☐ 6) Others.....

5. Monthly Income

☐ 1) Under 3,000 Yuan ☐ 2) 3,001 Yuan – 6,000 Yuan

☐ 3) 6,001 Yuan – 9,000 Yuan ☐ 4) Higher than 9,000 Yuan

Part 2: Purchase behaviour of organic food products

Instruction: Please mark ✓ in ☐ for the most possible answer

1. How often do you purchase organic food products?

☐ 1) Never ☐ 2) ≤ 1 time per month
☐ 3) 2 to 4 times per month ☐ 4) 5 to 12 times per month
☐5) More than 12 times per month

2. What type of organic food products did you buy or want to buy? (Can choose more than one choice)

☐ 1) Organic agricultural products (organic cereals, fruits, vegetables)
☐ 2) Organic tea products
☐ 3) Organic edible mushroom products
☐ 4) Organic livestock and poultry products
☐ 5) Organic aquatic products
☐ 6) Organic bee products
☐ 7) Organic milk powder
☐ 8) Others…….

3. How much money you spent each time when you buy organic food?

☐ 1) Less than 100 Yuan ☐ 2) 100-300 Yuan
☐ 3) Higher than 300 Yuan

4. Through which of the following channel did you mostly often buy organic food products?

☐ 1) Online Shopping ☐ 2) Supermarket
☐ 3) Convenience store ☐ 4) Grocery
☐ 5) Others…….

5. You always choose the same brand that you familiar with, or you would like to try other brands?

☐ 1) I always buy the same brand that I familiar with
☐ 2) Sometimes the same brand, sometimes other brands
☐ 3) I always buy from different brands

Part 3: Attitudes toward visual packaging design

Instruction: Base on your most recent impression about the organic food product that you have seen, how would you agree with the following statement?

		Five-level likert scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
		1	**2**	**3**	**4**	**5**
Attitudes toward visual packaging design						
1.	Color of Organic Food Packaging is good.					
2.	Typeface in Organic Food Packaging is suitable.					
3.	Logos in Organic Food Packaging are satisfactory.					
4.	Size of Organic Food Packaging is suitable.					
5.	Graphics in Organic Food Packaging are interesting.					

Part 4: Perceived organic food quality

Instruction: Base on your most recent impression about the organic food product that you have seen, how would you agree with the following statement?

		Five-level likert scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
		1	**2**	**3**	**4**	**5**
Perceived organic food quality						
1.	The quality of the organic food is superior.					
2.	The quality of the organic food is guaranteed.					
3.	The overall quality of the organic food is good.					

Part 5: Perceived organic food value

Instruction: Base on your most recent impression about the organic food product that you have seen, how would you agree with the following statement?

		Five-level likert scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
		1	**2**	**3**	**4**	**5**
Perceived organic food value						
1.	Sale price of the organic food is acceptable.					
2.	The perceived worth of the organic food product is high.					
3.	The deal is attractive.					
4.	The overall value for money is high.					

Part 6: Organic food brand preference

Instruction: Base on your most recent impression about the organic food product that you have seen, how would you agree with the following statement?

		Five-level likert scale				
		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
		1	**2**	**3**	**4**	**5**
Organic food brand preference						
1.	The organic food brand is better than other brands.					
2.	You will consider or eat more of this organic food brand than other brands.					
3.	You prefer this organic food brand over other brands.					

The researcher would like to thank you for your cooperation

for responding to this questionnaire.

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