

3 CONSUMER COMPREHENSION OF THE COMMUNICATION DESIGNS FOR FOOD PACKAGING

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When consumers have to choose from an array of products, package design plays a significant role in consumer communication. Specifically, the package design reveals the content and details of the product to the consumers. It likewise helps a product stand out in the market, and this is what package designers should focus on. This paper seeks to discover how consumers comprehend the communication designs in food packaging in order to elicit ideas for designing effective packages. Two steps are performed in this study: collection of food packaging samples and conduct of focus group interview among consumers. The information gathered from the focus group interview serves as basis for several conclusions. First, in terms of effective relay of messages in food packages, “texts” appear to achieve this better than do the other design elements; this is followed by “shape.” Second, the communication design pattern that best facilitates understanding is “brand name and product image.” Third, the preferred design elements of the respondents are ranked as follows: texts>shape>image>color. Overall, this research study can provide information on how consumers comprehend communication designs for food packaging and hence can serve as a guide for designers towards achieving effective food package designs.

Keywords: Food Package, Comprehension, Communication Design.

1. FOREWORD

1.1. Background and Motivation of this Research

PACKAGE plays a silent marketing role in the buying context. It is used to attract the attention of consumers to achieve its self-marketing,¹ with comprehensibility is the basis for its design.² However, it is worth discussing whether the communication design, which is developed out of the comprehension of the designer, can be understood by the consumer in the same way as well. Once a package is presented to the consumer, he or she will give selective responses depending on the package communication design stimulus during the comprehension stage. For instance, upon seeing the package of ABSOLUT vodka, people may comprehend the commodity according to the brand ABSOLUT as seen on the package, while somebody may understand the commodity by looking at the shape of the bottle. The purpose of this study is to explore the consumers’ cognitive methods for package comprehensibility communication design and determine the possible element combinations that are easy to understand and are helpful in enhancing the effectiveness of the package designer’s work.

1.2. Aim of the Research

Focus group interview is adopted in this study to discuss the comprehensibility communication design of food package by consumers. Collection of related interview data according to the above motivation is also conducted. The aims of this research are as follows:

1. To determine consumers’ interpretation of the comprehensibility communication design of food package through focus group interviews.

2. Make a conclusion from the analysis of consumer interpretation and comprehension of the design element combination of food package.

2. LITERATURE DISCUSSION

This study looked into relevant literature and gave an analysis of the design elements as well as the communication design of the package and its corresponding consumers' comprehensibility perception process, which will be needed for the subsequent procedure.

2.1. Design Elements and Communication Design of the Package

The package presents the communication design (Figure 1) of the enterprise or commodity subject to consumer interpretation, with the goal to achieve the sales target through the design elements,³ which is the primary principle in package comprehensibility communication design.⁴ Therefore, if the package design can present the visual charm of the commodity to consumers for their interpretation and perception, then consumers' purchasing desire will be stimulated, and the buying action will be fulfilled.

2.2. Consumer Comprehensibility Perception Process of the Food Package Communication Design

The consumer has developed a stable perception for the commodity content conveyed through the package design. For instance, the red color symbolizes hot taste, and the symbol ✓ represents Nike.⁴ Hence, the design should be clear and discernable, taking into account the comprehension and acceptance competence of the information receiver, when conveyed through the design elements by the designer.

Consumer perception will be affected by individual subjective conditions (physical and psychological) as well as by objective environmental stimuli (the product, brand and the package). Apart from the objective stimuli being manipulated by the manufacturer, individual perception and comprehension competence will vary depending on the different experiences and recall capabilities.⁵ As a result, the consumer will take the initiative to search for those marketing stimuli which will facilitate comprehension of the product information.⁶

Packages attract various sets of consumers; they exhibit great individual differences, and these attract consumers' market interest.⁵ Consumer's perception preference of the package design will be varied as well. Some people may focus on the price, while others pay attention to the product's appearance or design. Some even focus on the after-service and the convenient operation information design.⁷⁻⁹ Additionally, individual mood will greatly affect purchasing intention.⁵ Consumer perception will facilitate decision making in spite of the confusing stimuli according to past experience (recall), present needs, motive, and mood.⁵ The perception model of consumers' comprehension of the commodity content (Figure 2) is proposed in this research in order to determine the individual preferred design



Figure 1. Design elements and Communication Design of the Package

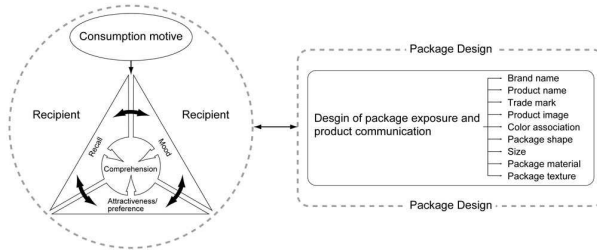


Figure 2. Relationship between Recipient and Commodity Package.

elements after the commodity's communication design is revealed. A sufficient amount of time is required^{5,8} in order to get a more intensive interpretation and comprehension of the commodity. Only when consumers' past experience (recall), existing beliefs, and attitudes are coincident can their purchasing behavior be triggered.⁵

3. METHODOLOGY AND IMPLEMENTATION OF THE RESEARCH

A focus group is often used to understand consumers' response and identify the objective for the package design.^{10–12} The food package used daily is examined in this study to explore the perception process involved in consumer comprehensibility of a food package's communication design through focus group interviews. The consumers' psychological sensation and the quality of food package content, as well as consumer satisfaction and experience are factors that are excluded in this research. In particular, the focus is to investigate how consumers perceive the design elements of a food package at first sight, and how they interpret and understand the food contained in the package. Two research steps are involved: collection of samples of the food package and implementation of the focus group interviews, which are described as follows.

3.1. Collecting the Food Package Samples

Food package being sold in RT-Mart was taken as the test sample either by convenience sampling or accidental sampling. It includes all food items on the optional product samples. Moreover, stratified sampling was adopted to acquire the actual testees because of the various kinds of food package available in the market. The source and steps in the sample collection process are as follows:

1. Source: The top 80% of the normal sales list¹ of RT-Mart in December 2006 was identified as the basis for the selection of the food package sample.
2. Step: a) The subgroup with the greatest quantity was selected as the sampling representative group from 30 commodity classifications.
b) The top three articles on the sales list were selected from each sampling representative group as the final actual test samples in this study. A total of 90 food packages are presented in Figure 3.

3.2. Implementation of the Focus Group Interviews

The following details the research method used in this study. The consumer was to comprehend the food package through the arrangement of its design elements in the focus group interviews. The researcher collected the data while acting as the moderator. The data were then submitted to the analyst at the end of the focus group interviews in order to find out the general perception of the consumer focus group on the communication design of the food package. The detailed implementation of this is as follows:

3.2.1. Member Selection of the Focus Group

The objective of this research is to determine the preconditions of consumers' understanding of a food package, resulting in membership restriction of the focus group of this study. This focus group

a) Each sampling representative group is selected from 30 commodity classifications.
 b) The top three sales articles are selected from each respective sampling representative group.

Category	a)		b)
	Sampling Representative	Class (Item Number)	
01--Refrigerated Foodstuff	Wheat Products [25]	Vegetarian food [24] Bean Products [16] Refrigerated Seasoning [13] Rice Products [7] Vegetable Products [5]	
02--Fresh Juice	Fresh Juice [36]	Tea & Coffee [18] Soy/Rice & Peanut Milk [12] Jelly [8] Pudding [6]	
03--Milk	Fresh Milk [22]	UHT Milk [12]	
04--Yoghurt	Fermented Milk [21]	Yoghurt jelly [18] lactic acid drink [3]	
05--Cheese & Dairy Products	Sliced Cheese [14]	Block Cheese [12] Normal Butter/Paste [12] Processed Cheese [7] Others [3] Fresh Cream [4]	
06--Egg	Processed Egg [10]	Egg [5]	
07--Processed Meat Products	Sausage & hot dog [15]	Ham/Bacon [10] Gift Box [1]	
08--Frozen Foodstuff	Pot [29]	Meat Bun, Steamed bun [29] Snack [22] Pies [20] Processed Meat [19] Dumpling [14] Jambly [15] Wheat Products [14] Vegetarian Food [14] Meat Ball [4] Processed Seafood [4] Flavor Pk [13] Sticky Rice Ball [10]	
09--Ice	Ice Cream [29]	Ice Cream [29]	
10--Tea & Coffee	Green Tea [15]	Milk Tea [12] Flavored Tea [12] Coffee [9] Oolong Tea [8] Jasmine Tea [9] Black Tea [6] Lemon Tea [5] Tea [5]	
11--Juice	Juice [31]	Fruit & Vegetable Juice [12] Flare Juice [7]	
12--Longer Lasting Products	Flavored UHT Milk [17]	Soy Milk [12] lactic acid drink [8] UHT Milk [7] Instant Sweets [5] Gift Box [2] Nutritional Milk Products [1]	
13--Beverage	Soda [25]	Mineral Water [20] Vinegar drinks [12] Sports Drinks [9] Cola [8] Functional Drinks [8]	
14--Candy	Chocolate [72]	Candy [42] Chewy Candy [26] Chewing Gum [19] Gift Box [7] Cointeur [1]	
15--Cookie	Multigrain Cookie [9]	Corn & Potato Snacks [80] Wafer [73] Rice Cookies [21] Gift Box [8]	
16--Oriental Snacks	Fish [28]	Jelly [25] Bean Curd [2] Preserved Fruits [20] Nuts [20] Western Nuts [16] Meat [14] Gift Box [4]	
17--Wheat Products	Instant Noodles [94]	Noodles [92] Flavor Pak [22] Instant Soup [16] Rice Noodles or Green Bean Noodles [14] Instant Rice Noodles or Green Bean Noodles [3] Instant Congee [3]	
18--Alcohol	Red Wine [69]	Whisky [44] Sweet Wine/Basis Wine [32] White Wine [29] Gift Box [24] Brandy [14] Cheese White Wine [11] Beer [9] Sake [6] Medication wine [3]	
19--Soy Sauce Seasoning	Soy Sauce [46]	Chili Sauce [25] Seasoning [20] Noodle Sauce [17] Phyllo/maise [11] Tomato Sauce [3]	
20--Flavor Seasoning	Seasoning [55]	Monosodium Glutamate [18] Sugar [16] Vinegar [12] Honey [11] Sesame Oil [10] Fructose [5] Salt [4]	
21--Oil	Oil [17]	Olive Oil [7] Sunflower Oil [5] Grape Seed Oil [5] Salad Oil [4] Vegetable Oil [3] Peanut Oil [2] Animal Oil [1] Others [1]	
22--Canned Foodstuff	Flat [41]	Pickles [25] Fruits [14] Soup [13] Others [12] Gluten [11] Vegetable [11] Meat [8] Dried Meat Flakes [10]	
23--Rice	Rice [29]	Others [22] Flour [4]	
24--Milk Powder for Adults	Functional Milk Powder [25]	Non-Fat Milk Powder [8] Whole Milk Powder [7]	
25--Baby Food	Baby Foodstuff [14]	Baby Flour [13] Follow-Up Milk Powder [10] Baby Milk Powder [9] Infant Milk Powder [8] Nutritional Supplements [6]	
26--Flour	Paste [27]	Polled Cuts [22]	
27--Tea Leaf	Bagged Tea [51]	Canned Tea [42]	
28--Nutritional Foodstuff	Healthcare [33]	Chicken Essence [19] Vitamins [11] Four Herbs Drinks [9] Biochemical [1]	
29--Coffee	3-in-1 Coffee [36]	Coffee Beans [15] Instant Coffee [12] Cream [8]	
30--Other Flavored Foodstuff	Multigrain Powdered Drink [4]	Instant Drink [10] Gift Box [9]	

Source: Products in **Bold** are sample representatives.

Figure 3. Source and Step for Sample Collection of the Food Package.

consisted of six consumer volunteers aged 20–26. Male and female subjects each accounted for 50% of the total sample, and they should have gone to RT-Mart at least once. Confirmation was obtained that the interviewees can discern and comprehend the communication design of the food package sample before the formal interview. Therefore, the analysis and discussion in this study are based on the data collected in the above interview process.

3.2.2. Implementation of the Focus Group Interviews

This interview was done in a closed and quiet assembly room so that external factors can be eliminated. The test sample was discussed at an actual proportion of 1:1 as shown in Figure 4 according to the frontispiece of the food package as displayed at the mart.

3.2.3. Implementation Procedure of the Focus Group Interviews

The research was done twice in May 2007: the first was performed to analyze the comprehensibility on 90 food package samples and identify 13 communication design models that promote the consumers' comprehension.¹³ The second was done to discuss and examine the 13 modes of the focus group.

There was a five-minute break for every 30 minutes of interview in order to avoid fatigue from prolonged response and to maintain the quality of the focus group interviews. Interviews were done twice, each lasting for nearly 120 minutes. The outline and procedure of interview are shown in Figure 5 and Table 1.

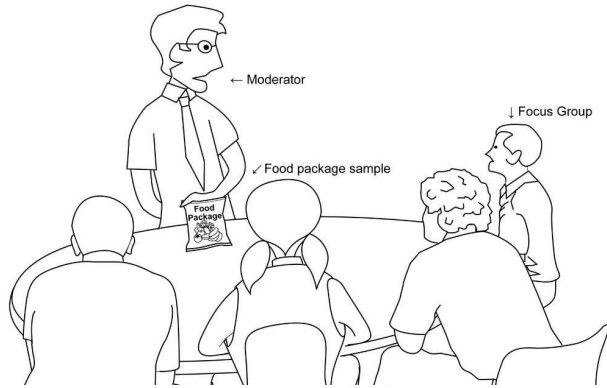


Figure 4. Focus Group Interviews.

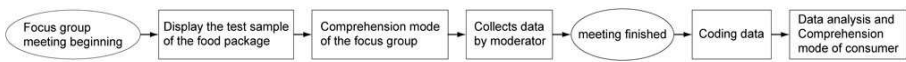


Figure 5. Implementation Procedure of the Focus Group Interviews.

Table 1. Interview Outline for the Communication Design of Comprehension for a Food Package.

Outline:

1. Hello. I think everyone here must have experienced purchasing goods. Let us then first discuss what are the design elements influencing your understanding of the communication design when you see a food package for the first time. (If the focus group does not respond to the topic, the significance of the following design elements must be emphasized.)
 - a. Texts on the package
 - b. Images on the package
 - c. Colors on the package
 - d. Trademark on the package
 - e. Shape on the package
 - f. Size of the package
 - g. Material of the package
 - h. Texture of the package
2. Next, we will discuss this package we have. How do you understand and know what it is at your first sight of it? (Ask them why, then the viewpoints of the focus group toward the communication design of the comprehension for the food package are collected during the interactions among the members.)
3. Are there any parts we have not touched from your individual experiences? Would you like to share them with us?

3.2.4. Collection and Analysis of Data

The focus group is adopted in this study to collect data using the interviewing outline, go through and investigate the suggestions made, and acquire the classification and concepts through some programs.^{14,15} The data were transformed and condensed according to the coding mode of the Grounded Theory² from open coding, axial coding,³ then to selected coding; the scientific theory was finally constructed to interpret the phenomenon¹⁴ (Table 2 and Figure 6).

4. RESULTS AND ANALYSIS OF THE RESEARCH

4.1. Comprehension Modes of the Consumers in the Focus Group on the Communication Design of Food Package

The results of this research were obtained according to the major opinions of the focus group on the package sample. The first interview was performed to analyze the comprehensibility of 90 samples and to identify 13 selective modes based on the comprehension modes of the consumers in the focus group (Table 3). The comprehension modes of the focus group on the communication design of food package were further analyzed in this study. The analysis showed that when discussing the package of Lipton

Table 2. Explanation for Open Coding, Axial Coding, and Selected Coding.

Category	Phase One		Phase Two		Phase Three	
	Details	Open Coding	Explanation	Axial coding	Explanation	Selected Coding
Sample of Referential Food Package	Shape	Package Shape	• Help the testee know the product source	Design Elements	• Completion of testee's comprehension	Comprehension
	Texture	Package Material				
	Color	Color Association				
	Volume	Size				
	Brand	Brand or Manufacturer				
	Image	Product Picture				
	Font Design	Topic of the Product				
	Surface texture	Package Texture				
	Content	Product Content				
Visual of Referential Focus Interview	Popularity	Popularity	• Lasting impression made by the product	Impression of the product	• Interfering on the testee's comprehension	Influencing variables
	Ad image	Degree of Exposure of Ad				
	Ad Recall	Familiarity	• Psychological reaction to the product	Preference for product		
	Sensation evoked by product	Feelings evoked by product				
	Sensation/feelings/reactions after purchasing	Purchasing experience				
	Product association	Visual transmission	• Favor for the product	Mood identification		
	Product attention	Focus preference	• Element selective sequence for comprehending the product	Visual receiving order		

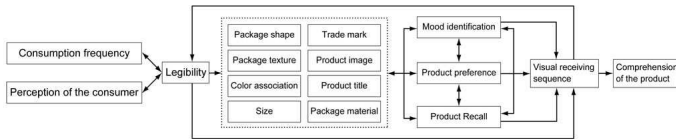


Figure 6. Interpretation of the Consumers' Comprehensibility Framework on the Communication Design of Food Package.

Table 3. Comprehension Modes of the Focus Group on the Visual Communication Design of the Food Package.

Comprehension Mode	Representative Commodity	Comprehension Mode	Representative Commodity
No.1 17% Brand Name + Product Image		No.8 7% Package Shape + Actual Product Appearance	
No.2 14% Product Name + Actual Product Appearance		No.9 6% Actual Product Appearance	
No.3 12% Brand Name + Actual Product Appearance		No.10 3% Package Shape + Color Association	
No.4 11% Brand Name + Product Image		No.11 3% Package Shape	
No.5 9% Brand Name + Product Name + Product Image		No.12 2% Package Shape + Product Image	
No.6 7% Famous Brand		No.13 2% Product Name + Package Shape	
No.7 7% Package Shape + Brand Name			

• Comprehension mode of a+b indicates that comprehension for the commodity is achieved through a visual message transmitted by a and b design elements.

milk tea, most of the consumers comprehended the product according to the preference sequence Lipton Brand, name of the milk tea, and the actual picture of the drink. Therefore, the first choice of the coding entry of the communication design to enhance comprehensibility is Brand Name, second is Product Name, and third is Product Image (see Sec. 4.2). The data analysts determined the design elements related to the comprehensibility communication design according to the analysis of property and orientation. It is found that most of the consumers comprehended the commodity content through a combination of more than two design elements during their experience of comprehending the food package after analyzing Table 3. In the comprehension modes, commodity information transmitted

through the combination of design elements of brand name plus product image was best comprehended. Additionally, the top six comprehension modes include either the brand name or commodity name as the first factor to be understood, which adopts the text as the comprehension mode, accounting for 72%. It should be added that the initial reaction of the focus group is to comprehend the product through its package name instead of any other product information, which is similar to ordinary consumers' behavior when they browse a food package. The major feature of the package design will be comprehended by the focus group when they search for the target merchandise visually among a set of goods. Therefore, when comprehending the word design element of the food package, the focus group prefers to know what is in the package through its brand name or merchandise name. Moreover, if the food package has an inherent shape, it would tend to facilitate comprehension, accounting for 22%. The rest, 6%, accounts for comprehension that involved the package design less.

4.2. Perception of the Consumer Focus Group on the Comprehensibility Communication Design of Food Package

Sequential comparison was incorporated into the investigation on estimation mode, brand image, visual effect, and commodity features in the research field of package design.^{16–18} The results relayed in Table 2 in this study are concluded in Table 3, from which it can be seen that there are one or three kinds of selective combination modes of communication design facilitating comprehension and that there exists a sequential relationship among the modes. However, some specific situations should be examined further; for instance, the consumer is inclined to regard the food packed in a transparent container as the real object rather than this information being plainly stated in the package material. For example, the comprehension mode of NO.3 is brand name plus real object display. However, the transmission of the real object display is not through its design elements. Therefore, when discussing the communication design facilitating comprehension, it is excluded (marked as *). Therefore, comprehension mode, excluding the real object display, can't be collected as an intensified focus of communication design.

Regarding the design element of a non-food package from the perspective of compression of communication design, consumers are inclined to understand the commodity's content directly from its transparent package container (such as a transparent plastic bottle, glass bottle, and transparent plastic bags) without understanding the text design element. This is a useful insight for package designers by dealing with the external texture of the package material or creating a different and novel means for visual perception of the package by using light colors or a transparent material container. Additionally, consumers are at ease buying commodities that they can actually see because of the commodity's transparent package attributes, for example, sweetmeat and blend oil. If the designer does not pay attention to the comprehension of the food package's content and merely takes the opaque material to advertise the package without considering consumers' preferences and comprehension manner, failure of the package design might result. In Table 4, the mode most frequently selected on the comprehensibility communication design of the food package is Brand Name plus Product Image. It can be noted that the consumer is inclined to comprehend a famous brand. However, as for the design element text, "Famous Brand" belongs to the category of Brand Name. Therefore, to avoid confusion, Brand Name is adopted as the standard term.

To compare the communication design elements in the comprehension mode, frequency weighting of the intensified emphasis of the communication design elements was made^{19,20} as follows. In this research, the data collected are sorted and recorded according to descriptive statistics, which are then adjusted by weighting (a kind of statistic method) to highlight the predominant feature of the sample data. This method will make the data more representative, and their analysis will also be enhanced. Thus, the significance of an effective understanding of the design element is determined.¹⁹ The calculation mode of the frequency weighting in Table 5 is given a weighting ratio according to the selected sequence (the first communication design selected is given three points, the second, two points, and the third, one point). Then this is multiplied by the number of times the communication design arises, and the summation is obtained. This is so because in the comprehension mode, the

Table 4. Selective Mode for Promoting Consumers' Comprehension on the Communication Design of Food Package.

Comprehension focus for design elements	Comprehension mode	Selection ratio	Communication design for promoting the comprehension		
			1 st choice	2 nd choice	3 rd choice
Text	No.1	17%	Brand Name	Product Image	
Text	No.2*	14%	Product Name	<i>Actual/Visual Appearance</i>	
Text	No.3*	12%	Brand Name	<i>Actual/Visual Appearance</i>	
Text	No.4	11%	Product Name	Product Image	
Text	No.5	9%	Brand Name	Product Name	Product Image
Text	No.6	7%	Brand Name		
Shape	No.7	7%	Package Shape	Brand Name	
Shape	No.8*	7%	Package Shape	<i>Actual/Visual Appearance</i>	
Actual Product	No.9*	6%	<i>Actual/Visual Appearance</i>		
Shape	No.10	3%	Package Shape	Color Association	
Shape	No.11	3%	Package Shape		
Shape	No.12	2%	Package Shape	Product Image	
Text	No.13	2%	Product Name	Package Shape	

* represents the comprehension mode including the non-package element (real object display)
 ● Bold italic **Brand Name** indicates that the original comprehension mode is Famous Brand

Table 5. Weaknesses, Strengths, and Taxis for the Design Elements Promoting Consumers' Comprehension on the Communication Design of Food Package.

Intensified focus of the design elements for communication design	Calculation on the Emergent Frequency Weighting			
	1 st choice	2 nd choice	3 rd choice	Total
Text (Brand Name)	3*(3)=9	1*(2)=2		11
Text (Product Name)	2*(3)=6	1*(2)=2		8
Shape (Package Shape)	4*(3)=12	1*(2)=2		14
Image (Product Image)		3*(2)=6	1*(1)=1	7
Color (Color Association)		1*(2)=2		2

● Selected sequence for the design elements of communication for promoting comprehension:
 TEXT(BRAND NAME)>PRODUCT NAME>SHAPE(PACKAGE SHAPE)>IMAGE(PRODUCT IMAGE)>COLOR(COLOR ASSOCIATION)

selected frequencies that promote the comprehension of communication frequency with Brand Name appear three times (three points), while the second appear once (two points). Its weighting mark is calculated as $3 * (3) + 1 * (2) = 11$. As compared to the $3 * (2) + 1 * (1) = 7$ of product image, the former is easier to be understood. However, as for the calculation of selected frequency, Brand Name ($3 + 1 = 4$) is the same as Product Image ($3 + 1 = 4$); the two communication design elements cannot be distinguished from one another. As a result, judgment error can be prevented only through the weighting method because of the narrow mark scope. Thus, word elements can be distinguished from the weighting method on the aspect of comprehension of the design elements, with the focus group preferring the use of brand name over product name in comprehending food package content.

As described in Tables 4 and 5, there are two kinds of design elements that can achieve the comprehension inclination in the mode of consumer focus group on the communication design of food package. The first inclination is to take the communication design element text such Brand Name and Product Name as the first choice in comprehending the product content, while the second inclination is to take the well-known and striking shape such as Package Shape as the design element in order to know the product content.

From Table 5, there are two unusual results. The consumer's calculation outcome of the selected frequency weighting for the communication design is Package Shape(Shape) >Brand Name(Text)>Product Name(Text)> Product Image(Image)>Color Association (Color). Based on the above statement, it can be seen that consumers' comprehension of a food package is influenced by their experiences and collective memory of the product. As for the familiar property of a commodity, the consumers are inclined to perceive the pattern more than the connotation of words on the food package. Therefore, only when designers take into account consumers' habit and understand the principles behind their perception of the food package's pattern design can an effective design be achieved. However, upon further investigation on how the communication design displayed by the design elements achieves comprehensibility, calculation of the total selected frequency weighting of the communication design of both Brand Name and Product Name is made. Therefore, the selected sequence of the design elements that promotes the comprehension on the communication design is TEXTS>SHAPE>IMAGE>COLOR.

5. CONCLUSION AND SUGGESTIONS

The discussion is concluded as follows:

1. Consumers' perception of the comprehensibility communication design of the food package needs to be completed through two or three design elements. On the aspect of comprehending food package, the design element TEXT displays the best communication, and the SHAPE, second.
2. In the cognitive mode of comprehensibility communication design of food package, the most commonly selected is BRAND NAME plus PRODUCT IMAGE. However, the consumer only needs a perception mode in promoting the communication design since the commodity's BRAND NAME denotes popularity.
3. The preferential grade of the design elements of food package in promoting consumers' comprehension is TEXTS>SHAPE>IMAGE>COLOR. This offers a design opportunity for the designer because the consumer is inclined to comprehend the commodity content directly from the transparent package. This means it needs to deal with the superficial texture of the package material or add some faint color on the transparent package in order to evoke various feelings through visual means.

Meanwhile, the consumers in this research can fulfill the comprehension on food package content with only the BRAND NAME since they already have an idea of the food package with some degree of popularity. Hence, the application of this research result is confined in the field of commodity package design study for those new brands with lower popularity or the actual package design application.

There are still some unconsidered aspects in this study although the program, methodology, and analysis strategy used can be employed as the reference for marketing or package design. The author would like to propose the following for subsequent research: (a) There may be other comprehension modes existing under a condition that includes more package samples because of the numerous food packages and the stratified sampling involved in the study. More profound data cannot be obtained from the excessive package samples at once. Maybe comprehension expressions can be deduced by making the property of one commodity more homogenous. All of these considerations can be investigated and verified in future studies. (b) Although design elements such as TEXT, IMAGE, SHAPE, and COLOR facilitate consumers' comprehension of the commodity package, we cannot say which combination of design elements can be understood in a short amount of time. This part can be verified by performing similar experiments.

Note

1. The top 80% of the normal sales list (2006-12/01~31): these data come from the Food Department of the Zhongli Store of RT-Mart, which includes the sales data gathered from 23 RT-Mart chains listing consumers' normal purchase for the entire month of December rather than through other sales promoting methods. It contains sales commodity content, market share, degree of favor for a commodity, and reversal rate, among others.
2. Grounded Theory: it is derived from the data after systemic collection and analysis.¹⁴
3. Axial coding: it is a process of organizing the decomposed, tested, compared, defined, and categorized data after open coding. Later, the researcher connects the categories through strategy and as a result of reconditioning; then there is venation, action, or reaction of the phenomenon analyzed according to one kind of coding criterion.

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