A STUDY OF CONSUMER BRAND CHOICE DECISION IN CARBONATED SOFT DRINKS IN PARTICULAR PEPSI, COKE AND EST (TOP 3 BRANDS) IN BANGKOK, THAILAND

# A STUDY OF CONSUMER BRAND CHOICE DECISION IN CARBONATED SOFT DRINKS IN PARTICULAR PEPSI, COKE AND EST (TOP 3 BRANDS) IN BANGKOK, THAILAND 

This Independent Study Manuscript Presented to The Graduate School of Bangkok University in Partial Fulfillment Of the Requirement for the Degree Master of Business Administration

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# This Independent Study has been approved by the Graduate School <br> Bangkok University 

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#### Abstract

The purpose of this study is to study Consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. The researcher used a quantitative research based on the concept of marketing mix 4Ps, brand effects, consumer behavior and demographics which gathered sample from the consumers of Pepsi, Coke and Est in Bangkok, Thailand by using the questionnaire as a tool to collect all data. The questionnaire has been surveyed within two significant aspects which are content validity and reliability. The statistic methods were classified with multinomial logistic regression and cross tabulation for hypothesis testing process which the result showed all influenced factors including marketing mix 4Ps, brand effects, consumer behavior and demographics. The result in each aspect significantly influences consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand


Keywords: Carbonated soft drinks, Brand preference, Brand Choice decisions,
Demographics, Marketing mix(4P's), Brand effects, Brand awareness, Brand identity, Brand personality, Brand loyalty, Brand relevance, Cultural Factors, Social Factors, Personal Factors, Psychological Factors, Consumer Behavior.

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## CHAPTER 1

## INTRODUCTION

## Introduction

In this chapter of study, the researcher explains the background which is related to subject of the research study through consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. Moreover, this chapter consists of problem statement, purpose of study, importance of study, scope of study, objectives and limitation.

### 1.1 Background

The total population of Thailand is $68,146,000$. The real GDP growth rate has decreased from 3.4\% (2015) to 3.1\% (2016).The GDP measured at Purchasing Power Parity(in international dollar million )in 2016 is $1,157,162.0$ and also the Consumer expenditure (USD million)in 2016 is 243,006.7.Lifestyle indicators depicts that Consumer expenditure on Food (USD million) is 52,139.6 (Euromonitor International, 2016)

Euromonitor International says that due to unpredictable economic environment and in substantial consumer confidence soft drinks enrolled slower total current value and volume growth in 2015, Thai consumers prevailed prudent when purchasing soft drinks and they always looked for the best deals and promotions. To seek consumers' attention many innovative products with advantageous concepts and revived packages were launched.

Even though traditional marketing channels are very important, especially television and radio, still in Thailand social media is becoming the most compelling channel in Thailand. Thai people are spending most of their time online so there are over 10 million active Facebook users and over 7 million Instagram users. So it's a great opportunity of attracting new customers through their advent on social media for major players like Coke and Pepsi (Euromonitor International, 2016)

The definition of carbonates by Euromonitor International is defined as non alcoholic drinks in which carbon dioxide disintegrates and as a result it is said to be as carbonated. Carbonates are considered as an accumulation of cola and non-cola carbonates, in case of general or low calorie. Euromonitor International involved both sweetened and/ or carbonates including simulated sweeteners.

Soft drinks were continued to lead in Thailand by Multinationals through manufacturers like The Coca - Cola Co, Pepsico Inc and Nestle SA. These players are enduring in carbonates, juice, RTD coffee and sports drinks. Most of them have large marketing budgets, which they entrust in advertising campaigns of mass media and point of sale activities.

Many consumers switch from one product to another due to similar features. So, to attract and maintain consumers, players hunted more interesting and innovative products. As a result Health and wellness came to be known as key trend compelling development of new product in soft drink in Thailand. Thus the manufacturers focused on minimizing sugar and calorie products, as well as new flavors and adapting ingredients with some types of health and wellness claim.

The most effective distribution format was convenience stores in 2015, in terms of Off-trade volume share growth. These channels supply to Thai consumers' need for convenience and the on go chilled soft drinks. Concurrently, players liked to announce their new products in convenience stores. Different promotional activities in convenience stores such as lucky draws and loyalty programs, also accelerated interest and purchases from Thai consumers.

## Company Background: Coke

The Coca Cola is the world's largest beverage company executing in more than 200 countries. Globally, the company is no. 1 provider of brilliant beverages, juices, and ready to drink coffees and teas. Coca- Cola limited works in cooperation with two local bottling partners in Thailand, ThaiNamthip Limited and Haad Thip Public Company Limited. The company is working in Thailand since 1949.It has the leading non-alcoholic beverage business in Thailand, employing around 10,000 people, maintaining seven bottling plants and more than 80 warehouses, and serving
over 385,000 customer outlets through a voluminous nationwide trading structure. They have a huge variety of beverages which includes Coca-Cola, Coke Zero, Coke Light, Namthip bottled water, Minute Maid Splash, Minute Maid Pulpy, Minute Maid Nutriboost, Habu, Sprite, Fanta, Schweppes and A\&W Root Beer.
(The American Chamber of Commerce in Thailand, 2015)

Company Background: Pepsi
Pepsi, a carbonated soft drink, produced and manufactured by PepsiCo was created and developed in 1893 and launched as Brad's Drink, it was named again as Pepsi-Cola on August 28, 1898, then to Pepsi in 1961, and in some areas of North America, "Pepsi-Cola Made with Real Sugar" as of 2014. Pepsi-Cola (Thai) Trading was established in Thailand on November 16, 1982 under Pepsi-Cola International and has single partnership with Sermsook Company Limited to operate and distribute all over Thailand. The variants of pepsi are Pepsi, Diet Pepsi, Pepsi Max, 7-UP, Diet 7-UP, Mountain Dew, Ginger Ale, Club Soda, Mirinda.(Wikipedia, 2016)

Company Background: Est
Est is a well-known cola soft drink from Thailand. It was manufactured by Sermsuk Public Company Limited and was launched in November 2, 2012. It was created in response to the completion of its contract with PepsiCo, on behalf of whom it had bottled and dispersed Pepsi in Thailand since 1952. The variants are est cola, est sugar free cola, est playor, est clear. (Wikipedia,2016) .The company sets a resourceful target of making the brand the leader of Thailand's Bt30-billion cola segment within three years. The company is doing its best to make est Thais' preferred alternative cola drink as soon as possible. As 40 per cent of Thai consumers are loyal to either Pepsi-Cola or Coca-Cola, about 60 per cent of them are brand switchers willing to try new cola beverages when they appear in the market. About $77 \%$ of consumers tested said they were appeased with the flavour of est and would buy it. (The nation multimedia, 2016)

### 1.2 Problem Statement

Bangkok-based Thai Drinks, a supplementary of Thai Beverage and its marketing wing for branded non-alcoholic beverages, aims to cash on trade liberalization under the Asean Economic Community (AEC) via the expansion of five flagship products- est, Oishi, 100 Plus, Magnolia and Nutrisoy- within the region. The company's plans to double the size of its beverage business by 2020, from US\$ 700 million in sales posted last year. Half of the business of Thai drinks in 2020 will be from foreign markets, and from Asean in particular. A strong challenge from alternative or substitute products is expected to slow demand but the thriving search for more refined and health-positioned soft drinks will endeavor upward pressure on unit prices and enhance value sales (Euromonitor International, 2016).

Carbonates is accustomed to see a 3\% CAGR in both entire volume and expense (at constant 2015 prices) sales over the projection period to reach 3.3 billion liters and Bt109.5 billion in 2020. Due to ascending health awareness, carbonates is anticipated to see moderate off-trade volume increase than other kinds of soft drinks. Thai people are expected to linger to shift from carbonates to perceived healthier or trendier drinks. So the companies are struggling to deal with consumer tastes that are changing toward healthier beverages such as bottled water and organic juices and gradually getting away from sodas.

The consumption rates of carbonated drinks are getting really low in many markets. Coke dominates the market as they have stronger relationships with other foreign markets. However, Pepsi has been hit by a decline in consumption of soda products and rise in sales of energy drinks and other healthier beverage options. Customers are becoming more health conscious and looking for healthier and natural drinks. So these changing trends are benefitting the companies that specialize in noncarbonated beverages. Thai people are becoming more aware of the benefits of healthier diet so it's an opportunities for growing demand for natural and healthy products. So the companies need to be more active in terms of innovation and new product launches to benefit sales. So, the researcher conducted this study to understand the consumer behavior and choice decision factors which makes them to
purchase carbonated soft drinks in this pace of changing health trends (Euromonitor International, 2016).

### 1.3 Intention and Reason for study

The problems and opportunities mentioned have interested the researcher to study this topic. Successful organizations will require extensive information on consumer behavior and factors influencing brand choice decision.

### 1.4 Research Objectives

In order to response this research study, the researcher set research question following the background and statement of problem as following:

## Major Question

1. Which factors influence consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand in 2015-2016?

Sub - Question;

1. Which brand dimension of Brand effects influences consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand?
2. Which consumer behavior factor influences consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand?

### 1.5 Purposes of Study

1. To study the aspects of marketing mix including product, price, place, promotion, packaging which significantly influences brand choice decision in carbonated soft drinks in Bangkok, Thailand.
2. To study the factors of brand effects which significantly influences brand choice decision in carbonated soft drinks in Bangkok, Thailand.
3. To define consumer behavior in making brand choice decision in carbonated soft drinks in Bangkok, Thailand.

### 1.6 Importance of Study

The importance of this study is to thoroughly understand the consumer behavior while making brand choice decision in carbonated soft drinks which helps developers to improve the strategy to reply the customer demand and increase customer target based on the result. The investors will get an important idea from this research to overcome the barriers which may affect while doing this business and also it serves as guideline in marketing strategy to gain more market share in this segment effectively.

### 1.7 Scope of Study

This research is to study and examine the brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand in which questionnaire will be used as an important tool for describing the scope of study as following:

### 1.7.1 Scope of Content

This research is surveyed about the classification of factors in brand choice decisions which comprises of marketing mix (product, price, place, promotion, and packaging), brand effects and consumer behavior in making brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand .The study is the quantitative research which analyzes the data based on related aspects in framework which are marketing mix 4ps, Brand effects and consumer behavior.

The research of this study is combined with population and sample of the customers who drinks carbonated soft drinks The researcher uses the nonprobability sampling technique with population of targeted sample with computing Yamane Taro's formula (Israel G.D, 1992).

### 1.8 Benefits of Study

There are 3 groups benefitted by this research study.
Firstly, carbonated soft drinks companies will have more understanding about consumer behavior who visits and purchase soft drinks at convenient stores,
hypermarket etc., and also factors affecting brand choice decision. The consumer insights will help for future development of marketing mix.

Secondly, convenient stores, hypermarket, supermarket etc., will also get benefit because they will come to know what are the major factors that affects the brand choice decisions of consumers while purchasing carbonated drinks and their will improve their category management.

Lastly, the researcher will receive benefit, as this research study will enhance her skills on how a good research is conducted.

### 1.9 Limitations of Study

- As questionnaire is the most significant part of this research, the sample group had taken time to fill in the questionnaire. Moreover, the respondents were in a hurry due to which they did not complete their answers with their genuine feeling.
- Due to the limitations of the research, the reference is not sufficient enough to support researcher's study.


## CHAPTER 2

## LITERATURE REVIEW

In this chapter the author provides theoretical foundation which is used within this Independent study. The theories originated from literature reviews and analysis of empirical studies related to the subject of consumer brands, brand effects and consumer behavior. The connection and correlation between each theory and frame work are also presented within this chapter.

### 2.1 Theory of Consumer Brands

According to association for consumer research, 2016 recent studies have revealed that duration of life evolution is associated with meaningful changes in consumer behavior. There are two perspectives that explain these changes. First perspective depicts that as there is a change in roles of people, endorsement of new roles, or giving up old roles their changes there consumer behavior too. These changes in consumer behavior are because of their need to redefine their selfconcepts as a result of assumption of a new role. Or due to role abdication as people attempt to dispose of products relevant to the depiction of a previous role.

The second perspective on changes of behavior is based on stress theory and research. Stress attributes to environmental, social or internal demands according to which the individual will readjust his or her normal behavior patterns (Thoits, 1995). Thus the assumption of new role or its anticipation will require major modification of lifestyle of people which can be distressing. Based on these two perspectives, it is recommended that changes in brand preference are the effects of life changes that indicates changeover into new roles and create stress that stimulates the individual to customize his or her behavior of consumption.

### 2.1.1 Brand Effects

To generate a powerful and enduring emotional connection with customers and other audiences is the main basis of branding. A brand is a set of components or "brand assets" which combines to create a unique, unforgettable, unmistakable, precious association between an organization and its customers. The brand is
conducted by a set of convincing visual, written and vocal devices to depict the plan of business and objective of an organization.


Figure2.1: Objectives of an Organization
Source: Roger, D.M. (2016). Brand Effectiveness. Retrieved from
http://www.modernmind.com/brand.htm

Branding is the expression and illustration that depicts the business plan in front of the world. Branding strategy should capture about the company, products and its services and depict consistently throughout all the brand assets in everyday marketing activities. The Brand image that conveys this emotional connection consists of many elements of the branding system that can be managed which includes both the visual image assets and language assets (Chung K. K, 2002)


Figure2.2: Branding system
Source: Roger, D.M. (2016). Brand Effectiveness. Retrieved from
http://www.modernmind.com/brand.htm

Nomenclature structure includes:

- Core and product brand hierarchy and relationship structure
- Product names and identities
- Brand design elements: color, shapes, proprietary elements, etc.
- Intentional visual and vocal associations
- Intentional legal and trade name and trademark relationships
- Internet domain name, URL and other web resources

Measuring Brand Effectiveness
There are many methods to measure the potential and actual efficiency of the brands. The simplest of them is 4D's of Branding; i.e differentiation, distinctiveness, defendable, "digit-able". An emphatic and dynamic brand must measure up in all 4 areas.

Distinctiveness: The brand should be distinct when compared in front of all communications. The more unique and distinct your communication is, the wider is the field of effective strength of competitiveness.

Differentiation: The brand assets and brand strategy must set the offerings apart and clearly express the specific arrangement intent of the offering (Dongchul, \& Seung-Bae, 2001)

Defendable: when investing to create brand assets, the brand must have ownership_strength to keep others from using close resemblance. This is applicable to trade names, logos, symbols and other visual assets.

Digit-able: There are strong and growing elements of electronic communications and commerce in most of the businesses that command that all brand assets be ascended effectively in tangible and electronic forms. This goes for all brand assets (Modernmind, 2016).

### 2.1.1.1 Brand Awareness

The prospect that the consumers are acquainted with the life and availability of the product is considered as Brand awareness. It also provides competitive advantages to the brand. Soft drinks are considered as a low involvement product so its sense of familiarity is identified by the name of the brand which will affect the judgment of consumer even though they would not purchase the brand (Aaker \& Mcloughlin, 2010). Mcdonald and Sharp (2000) mentioned that Brand awareness comprises of Brand recognition and Brand recall. Brand recognition is the aptness of consumer to recognize and clearly differentiate the brand when they are shown that specific brand in the stores. While brand recall is the prospective of customer to retrieve a particular brand from his memory when given the product class/ category, requirement satisfied
by that category or buying scenario as an indication. For example, a customer thinks about Kellogg's Corn Flakes when they want to buy cereal (Keller, 2008). Cola soft drink also can be a good example when customers want to buy a cola they will think about Coca-Cola and Pepsi. Generally, it is easier to identify a brand rather than recall it from the memory. Mcdonald and Sharp (2000) studied about the effect of brand awareness on consumer decision making on brand choices and found that if decision has to be made on new product by customers, brand awareness is a vital element for consumers. Moreover, consumers who are aware of one brand are likely to have tried less different brands within the same product category. It is said that building brand awareness is crucial for building brand equity as it includes the use of various prominent channels of promotion such as advertising, word of mouth publicity, social media, etc.

### 2.1.1.2 Brand Identity (Brand image)

Brand identity emanates from an organization, i.e., it is the responsibility of an organization to generate a product with distinguished feature and with extraordinary characteristics. It depends on the organization how it attempts to identify itself. How an organization wants to be recognized in the market. Marketing strategies and branding are the ways for an organization to convey its identity to the consumers. Brand identity comprises of - Brand vision, brand culture, relationships, presentations, positioning and personality.

### 2.1.1.3 Brand personality (unique characteristics of that brand)

Brand personality is a well-defined set of unique characteristics that are associated to a brand name. It is something to which the consumer can describe and by having a set of constant set of attributes an effective brand will increase its brand equity. This is the additional value that a brand benefits besides its functional benefits. Basically, there are five vital kinds of brand personalities: excitement, sincerity, ruggedness, competence and sophistication. If the personality of a brand is similar to a customer's personality then they are more likely to purchase it (Investopedia, 2016).
2.1.1.4 Brand Loyalty (loyalty towards one brand)

Brand loyalty means customer's first choice over other brands (Pride \& Ferrell, 2011). It also means the loyal customers who don't switch brands frequently (Aaker \& Mcloughlin 2010; Pride et al., 2011).It brings more prospective to draw customers from other brands (Hoyer \& Macinnis, 2008). Customers who purchase the products of same brand have "brand loyalty" (Kohli \& Leuthesser, 2011). They do not select a particular brand intentionally but prefer one brand over others (Pride \& Ferrell, 2011). Nevertheless, the brand loyalty is higher for a more popular brand. For example, customers are loyal towards global brands like Coke and Pepsi (Beverage Industry, 1998). Brand loyalty have three levels: recognition, preference and insistence. Firstly brand recognition happens when customer notices the existence of a brand and selects it as a second choice if the favorite brand is not inaccessible. Brand recognition is the most important part for brand awareness. Secondly, brand preference is superior than brand loyalty as consumer always selects their first choice brands over other brands if it is available. However, if their first choice brand is not available then they will move on to their second choice instead of finding in some other place. Customers can have a strong preference for a particular brand even though they might not have experienced it (Butterfield, 1999). The highest level of loyalty is brand insistence: customers are habitat to buy the brand they prefer and will ignore the substitute brands. If in case their first choice brand is unavailable then they will move on to some other place to find it (Pride \& Ferrell, 2011).

According to research of Shuptrine and Rumpel from University of South Carolina, Columbia (cited in Brand loyalists' rate Coke and Pepsi images as same, 1981) about Coca-Cola and Pepsi customer's loyalty, it was found that demographic characteristics of both Coca-Cola and Pepsi customers were almost similar, except that Coca-Cola customers were slightly old age and most of them had medium income. Both of their customers said that tastes of both were not much different, similar to their packaging and price. From the research, it was also found that both groups of customers rated opposite brand with negative perspective. In addition, Coca-Cola's customer were more loyal and were against switching brand while Pepsi's customer were less loyal when compared with coke and was easier to switch the brand.
2.1.1.5 Brand Relevance (Brand importance or purpose)

Brand relevance expresses the significance and role of branding and perception in defining new product or service categories. Aaker says that to manage perception about the new classification and to make brand relevant to the unique division or subcategory should take higher preference than managing approach about the product or service. (Aaker, 2016). To be important or relevant to a category or subcategory a brand needs to have the prospect and perceptibility to be considered. The goal in competition of brand relevance is to promote offerings so creative that competitors are simply not relevant.

### 2.2 Definition of Carbonated Soft Drinks

Particular with Coke, Pepsi and Est
A carbonated soft drink is a drink that typically contains carbonated water, a sweetener and a natural or artificial flavoring. The sweetener may be sugar, highfructose corn syrup, fruit juice, sugar substitutes or some combination of these. It may also contain caffeine, colorings, preservatives, and other ingredients. It is available in many formats, including cans, glass bottles and plastic bottles. (Wikipedia, 2016)

### 2.3 Choice Model, Choice Theory

Brand choice theory is one of the basic elements of marketing science.
Practically all decisions made by marketing managers include assumptions - explicit or implicit - about how consumers make purchase decisions and how strategic marketing variables (such as price, advertising and distribution) affect these decisions. To support this effort, the objective of research in brand choice is to create models that both consider the behavioral realities of consumer choice and allow accurate forecasts of future choice behavior (Russell, 2014).

Choice modeling is the preferred model for studies on consumer preferences. It is closely related as stated preference theory. According to a stated preference survey consumers state their choices among a potential set of alternatives (e.g. different brands, different product characteristics, different stores) options can include
both real and hypothetical market alternatives. It starts from stated preferences to go back to their determinants.

The alternative to stated preference is revealed preference where consumers are not asked directly what they prefer or choose but their actual choices and determinants are observed indirectly, for example considering what they purchase in different situations (Mario, 2008)

### 2.3.1 Choice Theory

Individual Decision Making - Individual decision-making forms the core for nearly all of microeconomic analysis. These notes summarize the standard economic model of rational choice in decision making. In the standard view, rational choice is defined as the process of regulating what options are available and then choosing the most preferred one according to some consistent criterion. In a certain sense, this rational choice model is already an optimization-based approach. We will find that by adding one empirically unrestrictive assumption, the problem of rational choice can be represented as one of maximizing a real-valued utility function (Levin \& Milgrom, 2004).

The utility-maximization approach to choice has several characteristics that help account for its long and continuing supremacy in economic analysis. First, from its earliest development, it has been deeply attached to principles of government policy making. Second, many of the comparative statics prophecy of the choice theory - the qualitative prophecy concerning the ways in which choices change as people's environments change - tend to be confirmed in empirical studies. Third, the optimization approach (including utility maximization and profit maximization) has an extremely wide scope. Fourth, the optimization approach provides a compact theory that makes experiential predictions from a relatively scanty model of the choice problem. (Levin \& Milgrom, 2004)

### 2.3.2 Definition of Choice Decision

Individual decision-making forms the basis for nearly all of microeconomic analysis. These notes outline the standard economic model of rational choice in
decision making. In the standard view, rational choice is defined to mean the process of determining what options are available and then choosing the most preferred one According to some consistent criterion. In a certain sense, this rational choice Model is already an optimization-based approach. We will find that by adding one empirically unrestrictive assumption, the problem of rational choice can be represented as one of maximizing a real-valued utility function. (Jonathan \& Paul, 2004)

The centrality of the rational choice model in economic analysis means that it is important to be aware of its role and limits. There is a long tradition of research marshaling experimental and empirical evidence that is in conflict with the most basic rational choice model. And indeed the last decade has seen a growing movement that questions the model's assumptions and seeks to incorporate insights from psychology, sociology and cognitive neuroscience into economic analysis. (Jonathan \& Paul, 2004)

### 2.3.3 Consumer Decision Making Process

To get more understanding of doing a research, decision making process has to be studied in order to figure out how the people make decisions and what factors influences them to make a decision to purchase the product or service. There are 5 steps of decision making process: first one is problem recognition, and then are search process, evaluating alternatives, Purchase decision stage and the last one is Post Purchase evaluation of decision (Ozmen, Emre, Oner, Khosrowshani \& Underwood, 2014).

## Customer's Decision Making Process

## 1. Need Recognition

## 2. Information Search

## 3. Evaluation

## 4. Purchase

## 5. Post-Purchase Evaluation

Figure 2.3: Customer's Decision Making Process
Source: Sheldon, S. (2016).Customer's Decision Making Process. Retrieved from https://www.google.co.th/search

## Problem Recognition:

In the first stage of decision making process the buyers first identifies what are the problems or needs in order to fulfill them and make them satisfied. It is must for a marketer to be sensitive to environmental changes which may give rise to consumer needs and to ensure that promotional campaigns awaken interest in change and are educational as well as informative (Frain, 1996).

## Search Process:

In this stage of information search, the marketer now has an open contingency to motivate the consumer towards his product or service. Promotional campaigns which are informative, based on solving user's problem or satisfy their needs are very important in this stage and satisfied users are often the best advertisement.so the
marketer must differentiate his product from competition which makes it different from competing product (Frain, 1996).

## Evaluation of Alternatives:

In this stage of evaluation the consumer is making an assessment of what is on offer and screening the alternatives. The marketer must ensure that his product or service is on that list of alternatives so that the consumer is aware of it. After knowing what their needs are, must kindle the buyer's interest so that he or she becomes assured of its appropriateness and they will know which one is the best alternative for them. It can be price, quality or other factors that are most important to them which they will review and making comparable with each parameter (Frain, 1996).

## Purchase Decision Stage:

By the advent of this stage the consumers will have decided which features are important for fulfilling their needs which is also important as well the consumers have already selected what they want to purchase which can be the outcome of their past experience or from advertisement. The marketer must have done everything to ensure that his product is ideal (Frain, 1996).
Post Purchase Evaluation:
Purchase has been made in this stage which sometimes can be satisfied from consumers but sometimes cannot get it. Post purchase fears and uncertainty can be disclaimed by inspiring advertising and most importantly there must be no gap between expectations and the performance of the product. (John Frain, 1996)

If the consumers are fully satisfied, it can bring them to repeat purchase and then can lead to customer loyalty also. However, if they are not satisfied the whole decision making process must begin again.
(Ozmen, Emre, Oner, Khosrowshani \& Underwood, 2014).

### 2.4 Marketing Mix (4P's)

Marketing mix is a common expression used to describe the different types of alternatives organizations have to make in the whole process of presenting a product or service to market. The 4Ps is probably one of the best ways to define marketing mix and was first expressed in 1960 by E J Mc Carthy. (Mind Tools Ltd., 1996) The 4 key variables in marketing operations are:

- Product
- Place
- Price
- Promotion

Marketing Mix can also be considered as an ingredient in a mixture, a formula for the success of marketing, has captured the popular imagination, so that when marketing professionals speak of the planning and programming of marketing effort, they usually attribute to the marketing mix. There are a number of points to highlight in respect of this concept of a "marketing mix". Firstly the balance of the ingredients will be determined itself by the nature of the product. Secondly, the concept of a 'mix' recommends that the fusion of ingredients may vary from time to time in order to reach its objectives. Thirdly, the marketing strategy is designed with a view to secure objectives at lowest cost. Fourthly, the marketing strategy cannot be stable; it has to react to changes in the environment of an organization. (Frain, 1996)

### 2.4.1 Product

## Product variety

Product variety offered by a brand can affect brand quality perceptions, and as a result, also affects brand choice even though the available option set is held consistent. Respectively, brands that offer greater variety of congruent (i.e., focused and internally persistent) options are expected to be recognized as having greater responsibility and proficiency in this category

Which consecutively upgrade their perceived quality and purchase likelihood. The results of six studies support this proposal and determine that (a) brands that offer increased adaptable variety were anticipated to have a higher quality; (b) this effect was negotiated by product impact of product on expertise-commitment; (c) If the observed quality is high it leads to a higher choice share of brands offering greater product variety, even amongst many options the options that are identical are offered by numerous brands; and (d) product variety also embedded post-experience approach of taste.(Simonson, 2006)

## Product quality (taste \& flavor)

The Quality of the product is composed of the attributes and the typical features that make up that product and its capability to captivate the needs of the customers. It is also defined as the attributes of a product that appease the wants of the customer which they need in exchange for monetary deliberation. The quality of a product is considered acceptable if the product satisfies the consumer. High brand loyalty is created if the quality of perception is high or more than the expectation level. (The Economic Glossary) The approach of product quality can be evaluated under two main different aspects: the objective quality and the perceived quality (Brunsø et al., 2005).The objective quality indicates to the mechanical, quantitative, and valid nature of products/services, processes, and quality controls. It involves the characteristics, performance, and durability of the products. Subjective or perceived quality refers to the consumer's value judgments or perceptions of quality which includes aesthetics and the perceived quality of the brand image. It has been recommended that the way a customer recognizes the quality of a brand plays a strong part in identifying the customer's commitment to that brand (Grace, 2011).

Availability of convenient size
For most product categories consumers have their favorite brand names, flavors, or sizes that they want to purchase and that they expect a "good" convenience store to carry. (Good brands carry with them images of quality, lifestyle, etc.) For some products, like cigarettes, consumers are extremely loyal to their brand and package size, and for other products like chocolate bars they may have several brands that they alternatively use. In any case, to provide convenience and value the stores must not only carry these bestselling brand name products but must be in-stock at all times. Inconsistency in-stock position is as damaging as not carrying the products at all(The Convenience Guru, 2016).

### 2.4.2 Packaging

Trendy Packaging
By looking at the best packaging of the past year, one gets a picture of the world today. And if the design trends are interesting, the diagnosis is that the patient is overwhelmed. In economics there is an old idea that "Every affluence creates a new
want." When one thing becomes popular, there is always a corresponding part that becomes more valuable because it has become rare. The designs of this year focus on share ability. Packaging is no longer simply about packaging the object-it is about the unboxing experience and art directing. This explains the shift towards basic design: large text spelling simple and straightforward messages, basic shapes making patterns in primary colors. Designers realize that packages are now billboard-like advertisements to be featured in photos and shared across social platforms. Thus, the benefit of a simple clear message stated in large bold letters gets repeated with every new viewer. (Dieline Media, 2016)

## Appealing logo

An interesting and eye-catching logo does play a big part in marketing a product, nothing comes as close as the effects a visually appealing and striking design has on prospective customers. The importance of the logo in marketing the product, was recognized by the business community. For them, the logo became a media campaign to introduce the brand products to consumers. So that from the characteristic shapes and images that exist, consumers can differentiate a product with other products.

## Creative slogans

For more than 100 years, companies have used slogans in their advertisements. Major corporations and small business alike have used catchy phrases to tell the world what makes their product or service special or different. When done well, a slogan can become the centerpiece of a company's identity - and if done poorly, a slogan can send the wrong message and actually drive customers away. Developing an effective advertising slogan helps companies cut through the chatter and get consumer attention quickly. While a paragraph-long explanation of a product might give potential customers plenty of information, a punchy slogan cuts through the chaos and creates a memorable image in the customers' minds (Smallbusinesschron, 2016)

## Variety of size

The size of a product is a major factor that influences the production time, marketing efforts and sales promotion. The size of the product may be large, medium, and small or may be of different measurements. For example: Soft drinks and other FMCG (fast moving consumer goods ) products, furniture, garments, shoes are now available in different sizes in the market. The consumer nowadays prefers those products which are available in different sizes and designs (Hirshleifer \& Glazer, 2005).

### 2.4.3 Price

Competitive Price
When a product is priced as per the competition, then it is known as competitive pricing. An important fact in customer purchasing behavior is price. Companies generally set the prices by taking into consideration competition, costs and price sensitivity. To result in profitable and sustainable businesses, managers have to set prices so it covers the cost of production, costs of company overheads and provides suitable profits (Marketing 91, 2016).

## Cheaper than its Competitors

Attempting to be the low-cost producer is a powerful competitive approach in markets where many buyers are price-sensitive. The aim is to open up a continual cost advantage over competitors and then use lower cost as a basis for both underpricing competitors and gaining market share at their expense or earning a higher profit margin selling at the going price. A cost advantage will create superior profitability unless it is used up in hostile price-cutting efforts to win sales from rivals. Firms that achieve low-cost leadership typically make low cost relative to competitors the theme of their entire business strategy-though they must be careful not to pursue low cost so ardently that their products end up being too stripped down and cheaply made to generate buyer appeal.(Porter, 1985)

## Good Value

Price is a key component of value, but "value for money spent" is apparently a more important consideration. Generally, most research on consumer attitudes on the convenience business has shown that consumers expect to spend a little more when they purchase products in a convenience store, and for the most part they don't mind. They can justify a small convenience premium because it is close, convenient, they are saving precious time, and if the store is clean, friendly and has the products they want. If however they feel that they are being "dredged" by high prices then they are turned off and value disappears (The Convenience Guru, 2016)

### 2.4.4 Place (or distribution)

## Accessibility

Location is obviously the key convenience success factor and for the customers the location must be close to where they live, where they work, or on their normal route to and from home or work. In addition, the store location, to be really convenient, must have easy access and egress, and convenient parking spaces for customers who only want to shop in a particular store and to get in and out quickly. The right location provides both convenience and value (The Convenience Guru, 2016)

## Merchandising Display

Increasingly today the store environment plays an important role in the consumer's concept of value, as more and more up-dated and modern convenience stores appear in the marketplace. If the store is clean, bright, breezy and easy to shop, the staff appears friendly and interested, and the store offers a wider range of convenience products and services, the consumer is more willing to favor it more frequently. If however, the store is old, tired, dirty, cluttered, etc., the store will probably only be used for "emergency purchases" (The Convenience Guru, 2016).

## Convenient hours

Convenient stores are open when customers need them- especially early in the morning and late at night. This is called convenient hours. Above $90 \%$ of new convenience stores are open 24 hours and the reason is simple due to consumer
demand. People who work in shifts rely upon convenience stores as shift workers are the most common customers served during overnight hours whether police and other protective service workers, hospital workers, taxi drivers and long distance travelers. Customers who walk in these stores generally look for items that are not easily available elsewhere such as a snack, or meal, coffee or beverage, gasoline or medicine or to use the ATM (Nacs, 2015).

### 2.4.5 Promotion

## Discount

Offering potential customers discounts on purchases is a way to quickly draw people into a store. Anytime if a customer is told to that save money, he or she will be more attentive. Discounts not only help the shoppers; they also help the business. From increased sales to improved reputation, discounts may be that one ingredient that can bring business success.

Cash coupons or gift vouchers
Coupons have proven themselves to be highly effective sales tools for every conceivable size and type of business. Because coupons "pull in the business" they have gained remarkable acceptance and popularity among adroit marketing managers. A simple explanation for their acceptance by advertisers is their astounding acceptance and use by the consuming public. In fact, Advertising Age (the Bible of the advertising industry) reports that $87 \%$ of all shoppers use coupons (Reece, 2016).

## Attractive advertisement

Advertising plays a very important role in today's age of competition. It is one thing which has become a necessity for everybody in today's day to day life, be it the producer, the traders, or the customer. It is an important part. It is the best way to communicate to the customers. It helps in informing the customers about the brands available in the market and the variety of products useful to them. Advertising is for everybody including kids, young and old. It is done using various media types, with different techniques and methods most suited. It is important for the customers, for
the seller and companies producing the products, for the society (Management study guide, 2016)

## Brand endorsements by celebrities

Celebrity branding or celebrity endorsement is a form of advertising campaign or marketing strategy used by brands, companies, or a non-profit organization which involves celebrities or a well-known person using their social status or their fame to help promote a product, service or even raise awareness on environmental or social matters. Marketers use celebrity endorsers in hopes that the positive images of the celebrity endorser of the brand will also be passed on to the products or the brand image associated with the celebrities. Celebrity endorsement is usually commonly used by fashion or beauty brands, but a non-profit organization relies on celebrities as well, as celebrities have mass communication skills which can attract people's attention and is helpful in reaching a wider audience to raise their awareness towards a certain organization or an issue. Thus, making celebrities effective fundraisers (Wikipedia, 2016).

### 2.5 Cultural Factors

Cultural factors represents the behavior, beliefs and attitudes, by the way we act learned by interacting or observing other members of society. This can be said as a shared behavior because what we do passes from one member of society to other. So, managers and marketers need to understand the real behavior and attitude of consumers to increase their level of satisfaction. if the marketer is able to understand the factors underlying consumer behavior, then they are able to expand affective marketing strategies to fulfill consumer needs(Assael, 1998).

### 2.5.1 Culture and social environment

Social and cultural aspects of a society form its basis. There are many uncontrollable environment factors of which culture is the most difficult one to embrace, take account of and tackle to advantage. This is basically when the product or service is "culture bound". Such products and services include those which are
basically endemic by nature of relatively small value and very common (Franke, Hofstede \& Bond, 1991)

Theories of social environment attempts to understand the interrelationship between social environment and the individuals. Social environment is inclusive of social groups, institutions, social hierarchies or even entire societies and cultures (Flamand, 2016)

### 2.5.2 Subculture (religion\& ethnic groups)

Subcultures develop when social intricacy is followed by cultural complexity then subcultures develop. Subcultures are most noticeable in geographic regions of a society- such as the South, Midwest, East, and West in the United States. With regard to geographic region, subcultures are established in part on unique historical emergence and settlement criterion in conjunction with economic and social diversity in the region (Mellot, 1984)

Ethnic Subcultures has emerged in the group of migrants that are sustained over generations. Ethnic subculture emanate when intermarriage within the group is retained furthermore with an enduring strong community structure. A subculture is lasting and self- perpetuating. The members of the subculture have general compatibility on norms, values, and social behavior.

Its influence in marketing is typically unique in many ways as a result of recognized and deliberate differences in consumption patterns, brand loyalty, media usage, advertising preferences, choice of retail stores, and price meaning (Mellot, 1984)

### 2.5.3 Regional subcultural differences

Regional subcultures can be very small as neighborhoods within a city or even large as the geopolitical divisions of the Northeast, the Midwest, the South, and the West. People of different regions identify themselves in different ways. Regional differences have been bound to the nationality, ethnic background, or religion of the original settlers in a region. Any endeavor to market to them based on region must be modulated by a perception of other subcultural influences to which they have been discovered. (Triandis, 2004) questioned how one may represent large countries like China, India or the United States with a single civil culture for specific country.

There are different specialties in each geographic area of Thailand: Northern Thailand, Northeastern Thailand, Southern Thailand, Eastern Thailand and Central Thailand. These provinces have their own unique sub-cultures and linguistic accent different from others. Hence, our concern is how the portion of Central Thailand can exemplify the whole country.

### 2.5.4 Social classes

Social class is considered as a group of people in a society who possess the same socioeconomic status. It is a set of concept in the social sciences and political theory based on model of social stratification in which people are grouped into a set of stratified category of society. The most common types are upper, middle and lower classes. According to philosopher Karl Marx, "Class" is determined entirely by one's relationship to the means of production. Members in a society will necessarily have some perception of their similarity and common interest. It is a set of combined views regarding how society should be organized legally, culturally, socially and politically. (Wikipedia, 2016)

### 2.5.5 Cultural trends

Cultural trends are widely followed by people strengthened by their popularity and compliance with the pressure of society. If there is a trend of something then more and more people want to follow it. They affect the shopping habits and behavior of consumer as they may be related to the exemption of new products or become a source of innovation for different brands. For example, Facebook has become a cultural trend and it has grown widely among young generation. It is not easy for a brand to create a new cultural trend. So, brands must remain alert to the new trends whether to follow it or to take part in the newly created market (The consumer factor, 2016).

### 2.6 Social Factors

There is a significant effect of social factors on consumer behavior. Buying decisions are always influenced by someone around the individuals. The important social factors are: Family, social role and status and Peer effects.

### 2.6.1 Family

There is always a strong influence of family members on buying behavior of individual consumers. An individual acquires values, develop and shape personality by the environment formed by the family. The prospect to develop attitudes and opinions towards various subjects such as social relations, society and politics are offered by this environment. A family is the first one to create impression about different brands, their products and habits of consumer (Lautiainen, 2015). For example, the brand perception when the consumers were young can carry out the same brand selection even after they are adult without even realizing that their family influenced these selections. For brands especially for Fast Moving Consumer Goods (FMCG) or Consumer Packaged Goods (CPG) - It's a real challenge and an opportunity for the family to promote a brand loyalty among all the members of the family. Thus it's important for brands to crate its image as a family brand so that they become a consumer habit for parents and children even when they become adults (The Consumer Factor, 2016).

### 2.6.2 Social role and status

A social role is a set of belief and activities that an individual possess and do according to the profession, position at work, position in the family, gender, and prospect of the community (The Consumer Factor, 2016).

Social status depicts the position of the individuals in social groups based on things like money and wealth, education, or occupation. Nowadays in societies status is important as people want the appreciation of others. Social status is attained by getting success or being rich by birth. Social roles and status are often reflected through Product and brand selection and they influence consumer behavior and purchasing decision (Lautiainen, 2015).

### 2.6.3 Peer Effect

Peer effect is the effect on a person by a group of people of the same age, same socio culture and even the same interest to change their behavior, their morals and attitudes towards different aspects in life just following the way other people are
in their group. If the influence of Peers is very high then one often adapts in to that pressure as one desires to prove their status, and often give in to peer pressure observing the morals, ideals, behavior or even just components that are recommended to them as being associated to their status.

For example a doctor may start playing golf just to expose his status, or a rap star may start wearing platinum chains to show his Rapper status. They are often scared that is they do not adapt themselves into the image as their peer group want to see them they will not be considered as a part of that group (Peer Pressure and Consumer Behavior, 2016).

### 2.7 Personal factors

There are many personal characteristics that influences buyer's decisions. These include the buyer's age and way of life, purchasing power and revenue, personality, self -concept and lifestyle. Some of these characteristic have a great impact on consumer behavior (Kotler and Keller, 2006).

### 2.7.1 Age and way of life

Consumer's lifestyle, beliefs, surroundings, activities, interest and consumer habits keep on changing during his life. He may not purchase the same products or services at 20 or 70 years because during his life a consumer may change his diet from unhealthy product to healthier diet to avoid health problems. The Family life cycle of the individual affects his lifestyle, buying behavior and values reliant if he's single, in a relationship, etc., and also the region of the country where he belongs to. So, for a retailer, it is stimulating to determine, comprehend, measure, and evaluate the criteria and personal factors that affect the shopping behavior of their customers. (The Consumer Factor, 2016)

### 2.7.2 Purchasing power and revenue

The purchasing power of an individual significantly influences his behavior and purchasing decisions based on his earnings and his assets. This affects his aspect on money and the level of influence of price in his purchasing decisions. But it also enacts a role in the kind of retailers where he goes and the types of brands he
purchases. Some consumers may also look for the social value just to show their social status of products they acquire in order to show "external assumption" of their incomes and their level of purchasing power.

### 2.7.3 Lifestyle

A person's lifestyle includes all of its activities, interests, values and opinions. The lifestyle influences a consumer's behavior and purchasing decisions. For example, most of the consumers have become health conscious now so they prefer healthy and balanced lifestyle and prefers to eat organic products and go to specific grocery shops, will do some exercise regularly and hence will purchase shoes, clothes and particular products, etc.. People from same subculture, social class and occupation may lead quite difference lifestyle. A lifestyle is a person's pattern of living in the world as expressed in the activities, interests and opinions. Lifestyle is shaped by whether consumers are money constrained or time constrained. Consumer decision is also influenced by core values that people desires over the long term. (Kotler \& Keller, 2006).

### 2.7.4 Personality and self -concept

According to Mellott, the study of Personality targets on aspects of personal behavior that can be standardized, related and probably, highly patterned. These aspects and patterns of behavior surround the individual in his or her correlation with others and with the environment .Many areas of marketing have been reviewed with personality studies, inclusive of promotion, store patronage, packaging, product and brand loyalty, attitudes towards manufacturers, and successive image formation (Mellott, 1984).

Self- Concept is a person's unique view of himself or herself. It can be considered as an image of one's awareness, attitudes, feelings, perceptions, and evaluation. It's the sum of an individual's background and experience (Mellott, 1984).

These two conceptions highly affect the choices and way of living of an individual's everyday life and also his shopping behavior and purchasing habits. In order to attract more customers, most of the brands are establishing an image and a personality that transmits the traits and values of the desired targeted consumers. The
more a product or brand supports a specific and amicable self -image to the consumer, the more it will be acquired and acknowledged.

### 2.8 Psychological Factors

There are four main psychological processes that affect consumer behavior: Motivation, Perception, Learning, Beliefs and attitudes.

### 2.8.1 Motivation

According to Mellott, Motivation is the practice of inducting or stimulating the behavior of individuals. A course of action can be inducted or changed through Motivation. Many complex factors are resulted from motivations of consumer, which are not only simple emotional or thoughtful factors but they are biological, social and physical too. Motivations of consumer are influenced by human needs such as hunger, thirst, relaxation, rest, to be charming, to have labor- saving devices, and also the need to achieve success among many others (Mellott, 1984).

Before any consumer motivation there has to be three conditions. Firstly, there should be awareness for the existence of motive or need. The acceptance of the motive specify to the individual that has happened to produce a state of discomfort or tension that led to the awareness. When a motive exists in response to a person's need to attain personal success in his or her chosen career, the awareness is said to be internal. Having motives created in response to working with a group who is making efforts to create standards for clean air and water are said to be external. Secondly individual energy must be mobilized. If the energy is activated then individuals will do something about the kindled need awareness. Thirdly the goal must be clear and specific towards which the energies of individuals are directed. The product and services offered by retail stores are generally the goals of consumers. For the occurrence of motivation all the three conditions mentioned above must be met. (Mellott, 1984).

### 2.8.2 Perception

A person who is motivated is always ready to move. The way the motivated person actually acts is dominated by his or her aspect or notion of the situation. Perception is the procedure by which an individual selects, organizes and interprets information inputs it creates as meaningful picture of the world. In marketing, perceptions are more important than the reality, as it perceptions will affect consumer's actual behavior.

People can emerge with difference perception of the same object because of three intuitive procedures includes selective attention, selective misinterpretation and selective reservation. (Kotler \& Keller, 2006)

### 2.8.3 Learning

Learning involves changes in an individual's behavior arising from understanding. Behavior of human is mostly well informed. Learning originates through the networking of expedite, stimuli, cues, responses and reinforcement. The demand of the product can be built by associating it with strong drives, using motivating keys and presenting positive expansion. (Kotler \& Keller, 2006)

### 2.8.4 Beliefs and attitudes

An assurance that an individual has on something is said to be as belief. Beliefs influences the buying behavior developing through the acquired experiences, learning and external influences like family, friends, etc.(The Consumer Factor, 2016) Attitude is stated as a feeling, an evaluation of an object or idea and the tendency to act in a particular way towards that thing. The individual develops a rational behavior towards similar objects or ideas following attitudes. Attitude serves as a link between perception of consumers and actual behavior of consumer so is important for the marketers to understand and to influence.

Beliefs along with attitudes are mostly well embedded in the minds of individual and are not an easy task to change. Beliefs and attitudes depict a person's personality. Extroverted people have attitudes that are different from introverted persons, and conservatives and liberals have different set of attitudes. (Mellot, 1984).

### 2.9. Consumer Behavior

According to Kotler, 2004.The buying behavior of consumers is stated as "The individuals and households who buy goods and services for personal utilization." A person who attain goods and services for self-pleasure is considered as 'consumer'. It is often illustrated as two distinct types of consuming entities: the personal consumers and the organizational consumers. The personal consumers purchase goods and services for his/her own use. That means the goods are bought for final use by individual, whereas organizational consumers, encloses for profit and not for profit of their business, government offices, association, all of them must purchase products, materials and services in order to run their organization (Kotler, 2004). Consumer behavior pertain to the type of goods and services that people buy, how they purchase them, why they buy them, where and how often they buy them. Likewise, it refers to individual and group decision making activities, the part that consumption depicts and the correlation between buyers and sellers. Relatively in all cases, the study of consumer behavior goes above the substantial purchase and analyzes the actions and reactions of individuals and groups after purchases are made. (Mellott, 1984).
"consumer behaviour...... is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences tosatisfy needs and desires." (Solomon, Bamossy et al. 2006, p6).

### 2.10 Statistic Research Collecting Method

### 2.10.1 Multinomial Logistic Regression

Using Multinomial logistic regression in choice model, marketing the data was collected. The normal estimation of technique is the multinomial logit choices which represent the categories of dependent variable and the each characteristic level is an explanatory variable (Mario, 2008).

The logit of transformation is a link function of logistic regression which can explain below;

- The logit transformation is the $\log$ of the odds that $\mathrm{y}=1$ relative to $\mathrm{y}=0$
- The logit link allows to transform the binary variable y into a continuous variable z
- The final equation is a regression model with a continuous variable on the lefthand side
- The only difference of standard regression model is that the distribution of the error is not normal but logistic.
- Estimation of $a$ and $b$ can be obtained by maximum likelihood which works with any known probability distribution of the errors and returns the maximum likelihood estimates (the most probable values for the parameters) (Mario, 2008).

Multinomial logistic regression uses correlation between two things for computing the data which are an independent variable and dependent variable and interaction. Multinomial logistic regression is an arrangement method that simplifies logistic regression to multiclass complications, i.e. with more than two possible separate results. The model is used to estimate the likelihoods of the unlike possible results of categories in distributed dependent variable, assumed a set of an independent variables (which may be real-valued, binary-valued, categorical-valued, etc.). Multinomial regression is a multi-equation model, similar to multiple linear regressions. For a nominal dependent variable with k categories the multinomial regression model estimates $\mathrm{k}-1$ logit equations. Even though SPSS does compare all arrangements of k groups it only shows one of the comparisons. This is normally any the first or the last category. The multinomial regression process in SPSS allows choosing generously one group to compare the others. In addition, the multinomial logit model can be used to model choices among the latent dependent variable regression and dependent variables, which is a nominal variable.

Discrete Choice Model: The random utility component is based on the assumption that a decision-maker $n(n=1, \ldots, N)$, faced with a finite set $C n$ of mutually exclusive alternatives $i(i=1, \ldots$, In $)$, chooses the option $i$ which offers the highest utility Uin. Each alternative's utility is described as a function of explanatory variables forming the characteristic part of the utility, $V(\cdot)$, and random disturbances, vin:

$$
\begin{equation*}
U_{i n}=V\left(\boldsymbol{x}_{i n}, \boldsymbol{\eta}_{i n} ; \boldsymbol{\beta}\right)+v_{i n}, \tag{1}
\end{equation*}
$$

where $\boldsymbol{x i n}$ is a $(K \times 1)$ vector of observed variables and $\eta \operatorname{in}$ is a $(M \times 1)$ vector of latent variables. These variables symbolize either (latent) characteristics of the decision-maker ( $\boldsymbol{x} \sin , \eta \sin$ ) or (latent) attributes of the alternatives ( $x z i n, \eta z$ zin). The importance of the descriptive variables on the function of the options is reflected in the $(1 \times(K+M))$ vector $\beta$. By assuming, for example, that each vin is independently, identically distributed (i.i.d.) extreme value, the widely used multinomial logit model results (e.g. Ben-Akiva \& Lerman, 1985):

$$
\begin{equation*}
P\left(u_{i n}=1 \mid x_{i n}, \eta_{i n} ; \beta\right)=\frac{\mathrm{e}^{V\left(x_{m}, \eta_{m} ; \boldsymbol{\beta}\right)}}{\sum_{j \in C_{n}} \mathrm{e}^{V\left(x_{m n}, \boldsymbol{\eta}_{m} ; \boldsymbol{\beta}\right)}} \tag{2}
\end{equation*}
$$

as is common practice in choice modeling, the representative utility $V(\cdot)$ is specified to be linear in parameters:

$$
\begin{equation*}
V_{i n}=\beta_{x} x_{i n}+\beta_{\eta} \eta_{i n} \tag{3}
\end{equation*}
$$

where $\beta x$ and $\beta \eta$ is a $(1 \times K)$ and a $(1 \times M)$ vector, respectively.
Latent Variable Model: Model identification typically requires that the unobserved $\eta \mathrm{s}$ are operationalized by multiple manifest variables, $y .2$. In the simplest case, a linear factor model is appropriate to describe the mapping of the indicators onto the latent variables, leading to the following measurement equation:

$$
\begin{equation*}
y=\Lambda \eta+\varepsilon \tag{4}
\end{equation*}
$$

where $y$ is a $(P \times 1)$ vector, $\Lambda$ is a $(P \times M)$ matrix of factor loadings and $\varepsilon$ is a $(P \times 1)$ vector of dimension errors which are i.i.d. multivariate normal. 3
Our structural model for the latent variables mixes alternative formulations by Ashok et al. (2002) and Walker and Ben-Akiva (2002) by allowing for interrelationships among the latent variables as well as for the influence of practical explanatory variables $z$ on the latent variables: 4

$$
\begin{equation*}
\eta=\mathbf{B} \eta+\Gamma z+\zeta \tag{5}
\end{equation*}
$$

where $z$ is a $(L \times 1)$ vector, and the $(M \times M)$ matrix $\mathbf{B}$ and the $(M \times L)$ matrix $\Gamma$ contain unknown regression parameters. The $(M \times 1)$ vector $\zeta$ represents random disturbances assumed to be i.i.d. multivariate normal.

Likelihood Function: Since all information about the latent variables is comprised in the multiple observed indicators, the joint probability of the choice and latent variable indicators conditioned on the exogenous variables is considered. Assuming that the random errors $v, \varepsilon$, and $\zeta$ are independent, integrating over the joint distribution of the latent variables leads to the following multidimensional integral:

$$
\begin{equation*}
P\left(u_{i}=1, \boldsymbol{y} \mid \boldsymbol{x}, \boldsymbol{\theta}\right)=\int_{R_{\eta}} P_{u}\left(u_{i}=1 \mid \boldsymbol{x}, \boldsymbol{\eta} ; \boldsymbol{\beta}, \boldsymbol{\Sigma}_{v}\right) f_{y}\left(\boldsymbol{y} \mid \boldsymbol{\eta} ; \boldsymbol{\Lambda}, \Sigma_{\varepsilon}\right) f_{\eta}\left(\boldsymbol{\eta} \mid \boldsymbol{z} ; \mathbf{B}, \boldsymbol{\Gamma}, \boldsymbol{\Sigma}_{\zeta}\right) d \eta, \tag{6}
\end{equation*}
$$

where $P u$ denotes the probability function of observing the choice of a specific alternative (2), the density function $f y$ for the latent variable indicators relates to the measurement model (4), and the density function $f \eta$ of the latent variables corresponds to the structural model (5). $R \eta$ denotes that integration is over the range space of the vector of latent variables that have a direct impact on the choice decision.

### 2.10.2 Descriptive Research: Cross Tabulation

In descriptive method, using frequency tables can display a summary of the supply of a single variable, while cross-tabulations (or call as cross-tabs) present a summary of the distribution of two or more variables. The researcher shows crosstabs in frequency distribution of one variable join to one or more other variables. It classifies the frequencies by the groups or class intervals of the variables being matched.

Cross-tabs comprise any combination of nominal, ordinal, interval, and ratio variables. The one of analytical tools that is the most valuable and famous using in market research because it contributes the riches facts in relationship between each variable (Qualtrics.com).

### 2.11 Sources of Questionnaire Items

### 2.11.1 Source of Questionnaire in each variable

Table 2.1: Source of Questionnaire Items

| Constructs | Indicators | Sources |
| :--- | :--- | :--- |
| Product | Brand name <br> Product quality <br> Product Variety <br> Availability of convenient size | Arunee, 2009; <br> Usamas, 2013; |
| Price | Competitive price <br> Cheaper price than its competitors <br> Good value | Arunee, 2009 <br> Usamas, 2013; |
| Place | Accessibility <br> Merchandising Display <br> Convenient hours | Arunee, 2009; <br> T.M.Santosh,2013 |
| Promotion | Discount <br> Cash coupons or gift vouchers | T.M.Santosh,2013 |
| Attractive advertisements |  |  |
| Packaging | Trand endorsements by celebrities |  |
| Appealing logo |  |  |
| Creative slogans |  |  |
| Variety of size | Arunee, 2009; |  |
| Brand Effects | Brand awareness <br> Brand identity <br> Brand personality <br> Brand loyalty <br> Brand relevance |  |

(Continued)

Table 2.1 (Continued): Source of Questionnaire Items

| Constructs | Indicators | Sources |
| :--- | :--- | :--- |
| Cultural <br> Factors | Culture and social environment <br> Subculture(Regional subcultural <br> differences) <br> Social classes <br> Cultural trends | Arunee, 2009; <br> Pirta, 2009 |
| Social Factors | Family <br> Social roles and status <br> Peer effects | Arunee, 2009; <br> Usamas, 2013; |
| Personal <br> Factors | Age and way of life <br> Purchasing power and revenue <br> Lifestyle <br> Personality and self- concept | Arunee, 2009; <br> Usamas, 2013; |
| Psychological | Motivation <br> Perception <br> Learning <br> Beliefs and attitudes | Arunee, 2009; |
| Factors |  |  |

### 2.12 Research Framework

This research studies about the consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est in Bangkok, this research framework explains about the details inside independent variables that effects on dependent variable.


## INDEPENDENT VARIABLE <br> 1. DEMOGRAPHIC <br> - Age <br> - Marital Status <br> - Gender <br> - Education <br> - Occupation <br> - Monthly Income level

## 2. MARKETING MIX

- Product
- Price
- Place
- Promotion
- Packaging
- Brand Effects


## 3. CULTURAL FACTORS

- Culture and social environment
- Sub-culture
(regional subcultural
differences)
- Social classes
- Cultural trends


DEPENDENT VARIABLE
Consumer Brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands)

5. PERSONAL FACTORS

- Age and way of life
- Purchasing power and revenue
- Lifestyle
- Personality and selfconcept

Figure 2.4: Conceptual Framework

### 2.13 Hypothesis of this Research

Hypothesis is a statement to explain research problem, and arrange for educated vision of research result (Sarantakos, 2012). According to doing experiment in research study, will be analyzing each variable along with the results from former research in order to offer hypothesis to this study.

Therefore, the Hypotheses are set as follow:

Table 2.2: Hypothesis Setting: The independent and dependent variables.

| Part | Section | Dependent Variables | Independent Variables |
| :---: | :---: | :---: | :---: |
| Marketing <br> 4 Ps | Product | Carbonated soft drink | 1. Brand name <br> 2. Product quality <br> 3. Product Variety <br> 4. Availability of convenient size |
|  | Price | Carbonated soft drink | 1. Competitive price <br> 2. Cheaper than its competitors <br> 3. Good Value |
|  | Place | Carbonated soft drink | 1. Accessibility <br> 2. Merchandising Display <br> 3. Convenient hours |
|  | Promotion | Carbonated soft drink | 1. Discount <br> 2. Cash coupons or gift vouchers <br> 3. Attractive advertisements <br> 4. Brand endorsements by celebrities |
|  | Packaging | Carbonated soft drink | 1. Trendy Packaging <br> 2. Appealing logo <br> 3. Creative slogans <br> 4. Variety of size |
|  | Brand effects | Carbonated soft drink | 1. Brand awareness <br> 2. Brand identity <br> 3. Brand personality <br> 4. Brand loyalty <br> 5. Brand relevance |

Table 2.2 (Continued): Hypothesis Setting: The independent and dependent variables

| Part | Section | Dependent Variables | Independent Variables |
| :---: | :---: | :---: | :---: |
| Other factors of Brand choice decision | Cultural factors | Carbonated soft drink | 1. Culture and social environment <br> 2. Subculture( Regional subcultural differences) <br> 3. Social classes <br> 4. Cultural trends |
|  | Social Factors | Carbonated soft drink | 1. Family <br> 2. Social roles and status <br> 3. Peer effects |
|  | Personal factors | Carbonated soft drink | 1. Age and way of life <br> 2. Purchasing power and revenue <br> 3. Lifestyle <br> 4. Personality and selfconcept |
|  | Psychological factors | Carbonated soft drink | 1. Motivation <br> 2. Perception <br> 3. Learning <br> 4. Beliefs and attitudes |

These are the followings hypotheses:
$\mathrm{H}_{0}$ : Product does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. $\mathrm{H}_{\mathrm{a}}$ : Product significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.1. Brand name does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.1a: Brand name significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.20: Product quality does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.2a: Product quality significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.3. : Product Variety does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.3a: Product Variety significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 1.4_{0}$ : Availability of convenient size does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H1.4a Availability of convenient size significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 2_{0}$ : Price does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. $\mathrm{H} 2_{\mathrm{a}}$ : Price significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H2.10: Competitive price does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 2.1_{\mathrm{a}}$ : Competitive price significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 2.2_{\mathrm{o}}$ : Cheaper than its competitors does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H2. $2_{\text {a }}$ : Cheaper than its competitors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.H
$\mathrm{H} 2.3_{0}$ : Good Value does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H2.3: Good Value significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H}_{3}$ : Place does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H}_{3}$ : Place significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.1. Accessibility does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.1a: Accessibility significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.2. Merchandising Display does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.2: Merchandising Display significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.3. Convenient hours does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H3.3a: Convenient hours significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 4_{0}$ : Promotion does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 4_{\mathrm{a}}$ : Promotion significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.1 $1_{0}$ : Discount does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.1 : Discount significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.2. Cash coupons or gift vouchers does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.2 $\mathrm{a}_{\mathrm{a}}$ : Cash coupons or gift vouchers significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.3: Attractive advertisements does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.3: Attractive advertisements significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 4.4_{0}$ : Brand endorsements by celebrities does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H4.4a: Brand endorsements by celebrities significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 5_{0}$ : Packaging does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H 5 a : Packaging significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.1 ${ }_{\mathrm{o}}$ : Trendy Packaging does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.1a: Trendy Packaging significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.2. Appealing logo does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.2 a: Appealing logo significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.3. Creative slogans does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.3a: Creative slogans significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.40: Variety of size does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H5.4a: Variety of size significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H}_{0}$ : Brand effects does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H}_{\mathrm{a}}$ : Brand effects significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.10: Brand awareness does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.1a: Brand awareness significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.2. Brand identity does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.2a: Brand identity significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.30: Brand personality does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.3a: Brand personality significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.40: Brand loyalty does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.4a: Brand loyalty significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6. $5_{0}$ : Brand relevance does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H6.5a: Brand relevance significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 7_{\mathrm{o}}$ : Cultural Factors does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H 7 a : Cultural Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.1 $\mathrm{o}_{0}$ : Culture and social environment does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7. $1_{\mathrm{a}}$ : Culture and social environment significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.2 ${ }_{0}$ : Subculture (Regional sub cultural differences) does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.2a: Subculture (Regional sub cultural differences) significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.3: Social classes does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.3: Social classes significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.40: Cultural trends does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H7.4 : Cultural trends significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8 ${ }_{0}$ : Social Factors does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8 $\mathrm{a}_{\mathrm{a}}$ : Social Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.1 $1_{0}$ : Family does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.1 $1_{\mathrm{a}}$ : Family significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.2 $2_{0}$ : Social roles and status does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.2a: Social roles and status significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.30: Peer Effects does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H8.3a: Peer Effects significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9 ${ }_{0}$ : Personal Factors does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 9_{\mathrm{a}}^{2}$ : Personal Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9. $1_{0}$ : Age and way of life does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.1a: Age and way of life significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.2. Purchasing power and revenue does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.2a: Purchasing power and revenue significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.3. Lifestyle does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.3 ${ }_{\mathrm{a}}$ : Lifestyle significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.4 $4_{0}$ : Personality and self-concept does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H9.4a: Personality and self-concept significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10 ${ }_{0}$ : Psychological Factors does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H}_{10}$ : Psychological Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.1 $1_{0}$ : Motivation does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.1a: Motivation significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.20: Perception does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.2a: Perception significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
$\mathrm{H} 10.3_{\mathrm{o}}$ : Learning does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.3a: Learning significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.40: Beliefs and attitudes does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

H10.4a: Beliefs and attitudes significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

## CHAPTER 3

RESEARCH METHODOLOGY

This research is based on quantitative methodology to collect the data in order to attain the aims and objectives of the research. Questionnaire as the main survey tool has been distributed to the customers to analyze and conclude about research design, population, sample selection, research instrument, reliability and validity assessment, data collection and statistic for data analysis, which is described below.

### 3.1 Research Design

In this study, author gathered data and analyzed data by using questionnaire, the aim of this research is to explain the factors which influence Consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

Quantitative research is 'Explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics).

It means that the professional quantitative research is based on accurate data. Therefore, the questionnaire setting, population and sampling designing and data collection has been set reasonably.

Qualitative approach will be used as secondary data which the researcher collects, analyzes, and organizes the study by using exploratory research design through literature review, related studies are journals, thesis, articles, books, researches, internet and articles both local and international

## Major Question

Which factors influence consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand in 2016?

Sub - Question;

1. Which brand dimension of Brand effects influences consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand?
2. Which consumer behavior factor influences consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand?

### 3.2 Questionnaire Design

According to review researches, most previous research of customer's choice criteria in higher education has used questionnaire to conduct information. In addition, a concept has been pointed out by Uma Sekaran \&Roger Bougie (2013), questionnaire as a very important tool for investigating patterns with numerical data and has adopted by many successful management, marketing and consumer research.

In this study, the questionnaire was designed to gather general information about demographics, marketing mix, cultural factors, social factors, personal factors, psychological factors and customer lifestyle data which is related to customer brand choice decision in carbonated soft drinks in particular with coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand.

### 3.3 Population and Samples

Sampling begins with precisely defining the target population. The target population must be defined in terms of elements, geographical boundaries and times. Therefore, the research objective and the scope of the study play a crucial role in defining the target population (Uma Sekaran \&Roger Bougie, 2013)

Sample size
Population in this research is customers who consume carbonated soft drinks in their daily life. Moreover, total population of 4, 73,156 persons were taken who lives in these 4 districts of Bangkok- Rat Burana, Chom thong, Thungkhru and Thonburi Districts of Bangkok (Wikipedia, 2016).

### 3.4 Sample Size

A sample size in this study is from 400 customers who consume soft drinks in Rat Burana, Chom thong, Thungkhru and Thonburi Districts of Bangkok. The author collected the sample from actual population and simplified formula for proportions as following Taro Yamane (1973):

Formula $\mathrm{n} \quad=\frac{\mathrm{N}}{1+\mathrm{Ne}^{2}}$
Which:
n is the sample size
N is the population size
$e$ is the acceptable sampling error
At $95 \%$ confidence level and $e=1-0.95=0.05$

$$
\begin{aligned}
\text { So: } \mathrm{n} & =\frac{4,73,156}{1+4,73,156}(0.05)^{2} \\
& =399.66
\end{aligned}
$$

Within $\mathrm{N}=4,73,156$ and $\mathrm{e}=5 \%$ (at $95 \%$ confidence level)
Hence, the sample size is 400 respondents.
According to the field sampling which has been conducted in four locations, therefore, the sample size based on contribution of each location is as follows.

Number of sample size by location.
Table 3.1: Calculation of Proportionate Sampling area

| Areas of Bangkok | \% of population | Total Sample size $=400$ |
| :--- | :--- | :--- |
| Rat Burana | $18 \%$ | 72 |
| Chom Thong | $33 \%$ | 132 |
| Thungkhru | $25 \%$ | 100 |
| Thonburi | $24 \%$ | 96 |
| Total | $100 \%$ | 400 |

So, the total sample size for this study is 400 persons

Following the information from Marketeer Magazine, 2014., The market share of the top three brands of carbonated soft drinks are as follows: Coke- $52 \%$, Pepsi- $29 \%$, Est- $12 \%$ and others $-7 \%$. As the researcher focus mainly on these three brands so market share of other brands are not considered in the total market share. So the total market share considered for sampling of this research is $93 \%$.

Sampling Method (Proportionate sampling method) is used by subtracting market share. So, $93 \%$ is used to represent $100 \%$ but we used this to make it in proportion to 400 as $7 \%$ belongs to other brands (Marketeer, 2014)

Table 3.2: Calculation of Proportionate Sampling

| Brand's Name | Market Share | Number of Respondents |
| :---: | :---: | :---: |
| Coke | $52 \%$ | 208 |
| Pepsi | $29 \%$ | 116 |
| Est | $12 \%$ | 48 |
| Total | $93 \%$ | 372 |

Since the total number of sampling is 400 so the researcher increased 28 responses in proportion to market share to make it 400 as follows.

Table 3.3: Calculation of Proportionate Sampling

| Brand's name | Market share | Number of respondents |
| :---: | :---: | :---: |
| Coke | $52 \%$ | 223 |
| Pepsi | $29 \%$ | 125 |
| Est | $12 \%$ | 52 |
| Total | $93 \%$ | 400 |

Therefore, the total number of questionnaire which is 400 sets were divided following to the proportion by respondents for Coke 233 persons, Pepsi 125 persons and Est 52 persons by distributing questionnaires in 4 districts of Bangkok as follows: Rat

Burana area collected for 72 respondents, Chom thong area for 132 respondents, Thungkhru area for 100 respondents and Thonburi area for 96 respondents.

And then, the researcher decides to use accidental sampling method .Accidental Sampling is a kind of non-probability sampling that is estimated by taking samples from that part of population that is easily accessible. A sample population is selected because it is promptly available and beneficial, as researcher is illustrating on association or structure to which is easily accessible.

It is one of nonprobability sampling to collect data by distributing in 4 districts of Bangkok- Rat Burana, Chom thong, Thungkhru and Thonburi of Bangkok in shopping malls area like Big C, Tesco Lotus, Max Value, 7 Eleven, universities.

### 3.5 Survey Instruments

As the author mentioned above, the questionnaire for this research is based on the topic which is Consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand, therefor, the questionnaire totally has five parts as follows:

Part 1. It refers to the carbonated soft drinks brand which the customer prefer to drink

Table 3.4: Level of Information Measurement and Criteria for Carbonated soft drink brand

| Variable | Level of <br> Measurement | Criteria Classification |
| :--- | :---: | :--- |
| 1. 1. Which brand do you <br> prefer more in soft drinks? | Nominal | 1. Coke <br> 2. Pepsi <br> 3. Est |

Part 2. It is related to the factors which influence your brand choice decision towards top 3 brands of carbonated soft drinks in Bangkok.

It includes 10 questions which are:
2. Product
3. Price
4. Place
5. Promotion
6. Packaging
7. Brand Effects
8. Cultural Factors
9. Social Factors
10. Personal Factors
11. Psychological Factors

All items were weighted by target respondents on a seven-point Likert scale. In each questions are scaled by Number 0 means "Not any effect" to number 7 means "Extremely important". The weight (scores) are fixed in each level as below:

| Extremely important | $=7$ points |
| :--- | :--- |
| Very important | $=6$ points |
| Moderately important | $=5$ points |
| Neutral | $=4$ points |
| Slightly important | $=3$ points |
| Low important | $=2$ points |
| Not at all important | $=1$ point |
| No effect | $=0$ point |

For the measurement analysis the author use mean and interval class formula to calculate the range of information in each level as followed;

Interval class $=\underline{\text { Range (Max value }- \text { Min Value) }}$
Number of Interval
$=\quad \underline{(8-1)}$

## $=\quad 0.86$

Therefore, the analysis and interpretation of factors in each aspects will use the average score interpretation that are

Average score of 6.03-7.00 refers to Extremely Important Level
Average score of $5.17-6.02$ refers to Very Important Level
Average score of 4.31-5.16 refers to Moderately Important Level
Average score of 3.45-4.30 refers to Neutral Level
Average score of 2.58-3.44 refers to Slightly Important Level
Average score of $1.73-2.58$ refers to Low Important Level
Average score of $0.87-1.72$ refers to Not at All Important Level
Average score of $0.00-0.86$ refers to Not Any Effect Level

Part 3. It is related to General Information and Demographic which consist of Gender, Marital Status, Age, highest level of education, occupation and Monthly income level in brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

Table 3.5: Level of Information Measurement and Criteria for Demographic

| Variable | Level of <br> Measurement | Criteria Classification |
| :--- | :--- | :--- |
| 12. Gender | Nominal | 1. male <br> 2. female |

Table 3.5 (Continued): Level of Information Measurement and Criteria for Demographic

| Variable | Level of Measurement | Criteria Classification |
| :---: | :---: | :---: |
| 13. Marital Status | Nominal | 1. single <br> 2. married <br> 3. divorced <br> 4. Widowed |
| 14. Age | Ordinal | 1. <16 years <br> 2. 16-20 years <br> 3. 21-25 years <br> 4. 26-30 years <br> 5. 31-35 years <br> 6. >36 years |
| 15. Highest level of Education | Ordinal | 1. Primary / Middle school <br> 2. High school or equal <br> 3. Diploma/ College <br> 4. Bachelor's degree <br> 5. Master degree <br> 6. Doctoral degree <br> 7. Others |
| 16. Occupation | Nominal | 1. Business owner <br> 2. Housewife <br> 3. Student <br> 4. Full time worker <br> 5. Government Worker <br> 6. No Job <br> 7. Others |

Table 3.5 (Continued): Level of Information Measurement and Criteria for Demographic

| Variable | Level of <br> Measurement | Criteria Classification |
| :--- | :---: | :--- |
| 17. Monthly income | Ordinal | 1. Below 15,000 baht |
| level |  | $2.15,001-30,000$ baht |
|  |  | $3.31,001-50,000$ baht |
|  |  | $4.50,001-80,000$ baht |
|  |  | 5. 80,001-100,000 baht |
|  |  | 6. more than 100,000 baht |

Part 4. It is related to Factors influencing in making Brand Choice Decision (4 P's Marketing Mix

It consists of 6 aspects: Product, Place, Price, Promotion, Packaging and Brand Effects.

Product factors aspect includes 4 questions that are
18. Brand name
19. Product quality (taste \& flavour)
20. Product variety
21. Availability of convenient size

Price factors aspect includes 3 questions that are
22. Competitive Price
23. Cheaper than its competitors
24. Good Value

Place factors aspect includes 3 questions that are
25. Accessibility
26. Merchandising Display
27. Convenient hours

Promotion factors aspect includes 4 questions that are
28. Discount
29. Cash coupons or gift vouchers
30. Attractive advertisement
31. Brand endorsements by celebrities

Packaging factors aspect includes 4 questions that are
32. Trendy Packaging
33. Appealing logo
34. Creative slogans
35. Variety of size

Brand Effects aspect includes 5 questions that are
36. Brand awareness
37. Brand identity (Brand image)
38. Brand personality (unique characteristics of that brand)
39. Brand loyalty (loyalty towards one brand)
40. Brand relevance (Brand importance or purpose)

All items were weighted by target respondents on a five-point Likert scale. In each questions are scaled by Number 1 means "Strongly Disagree" to number 5 means "Strongly Agree". The weight (scores) are fixed in each level as below

| Strongly Agree | $=5$ points |
| :--- | :--- |
| Agree | $=4$ points |
| Neutral | $=3$ points |
| Disagree | $=2$ points |
| Strongly Disagree | $=1$ point |

For the measurement analysis the author use mean and interval class formula to calculate the range of information in each level as followed;

Interval class $=$ Range (Max value - Min Value)
Number of Interval
$=\quad \underline{(5-1)}$
5
$=0.8$
Therefore, the analysis and interpretation of factors in each aspects will use the average score interpretation that are

Average score of 4.21-5.00 refers to Strongly Agree Level
Average score of 3.41-4.20 refers to Agree level
Average score of $2.61-3.40$ refers to Neutral level
Average score of $1.81-2.60$ refers to Disagree level
Average score of $1.00-1.80$ refers to Strongly Disagree Level

Part 5. It is related to Factors affecting in making Brand choice decision in carbonated soft drinks

It consists of 4 aspects: Cultural Factors, Social Factors, Personal Factors and Psychological Factors.

Cultural Factors aspect includes 4 questions that are
41. Culture and social environment
42. Subculture (Regional sub cultural differences)
43. Social classes
44. Cultural trends

Social Factors aspect includes 3 questions that are
45. Family
46. Social roles and status

## 47. Peer effects

Personal Factors aspect includes 4 questions that are
48. Age and way of life
49. Purchasing power and revenue
50. Lifestyle
51. Personality and self-concept

Psychological Factors aspect includes 4 questions that are
52. Motivation
53. Perception
54. Learning
55. Beliefs and attitudes

All items were weighted by target respondents on a five-point Likert scale. For the each questions, the scaled from Number 1 which means "Strongly Disagree" to number 5 which means "Strongly Agree". The weight (scores) are fixed in each level as below

| Strongly Agree | $=5$ points |
| :--- | :--- |
| Agree | $=4$ points |
| Neutral | $=3$ points |
| Disagree | $=2$ points |
| Strongly Disagree | $=1$ point |

For the measurement analysis the author use mean and interval class formula to calculate the range of information in each level as followed

$$
\begin{aligned}
\text { Interval class } & =\frac{\text { Range }(\text { Max value }- \text { Min Value })}{\text { Number of Interval }} \\
& =\frac{(5-1)}{5} \\
& =0.8
\end{aligned}
$$

Therefore, the analysis and interpretation of factors in each aspects will use the average score interpretation that are

Average score of 4.21-5.00 refers to Strongly Agree Level
Average score of 3.41-4.20 refers to Agree Level
Average score of $2.61-3.40$ refers to Neutral Level
Average score of $1.81-2.60$ refers to Disagree Level
Average score of $1.00-1.80$ refers to Strongly Disagree Level

Part 6. It is related to Consumer Behavior Factors affecting in making Brand choice decision in carbonated soft drinks

Consumer Behavior Factors aspect includes 14 questions that are
56. Where is the most common place that you purchase soft drinks?
57. How often do you consume a carbonated soft drink?
58. On an average how many times do you visit stores to purchase carbonated soft drinks?
59. What pack size of carbonated soft drinks do you normally purchase?
60. How much amount of carbonated soft drink do you consume per time?
61. What other brands do you normally consume other than Coke, Pepsi or Est?
62. Why do you drink carbonated soft drinks?
63. What influence you to drink carbonated soft drinks?
64. Why do you prefer to drink a particular brand?
65. If you cannot find your favorite carbonated soft drink then which brand do you buy?
66. Do you think you can identify the difference in taste among the three brands (Coke, Pepsi and Est)?
67. If you order a specific soft drink brand but you get another brand instead of it, what will you do?
68. What is the most effective advertising that makes you want to drink a carbonated soft drink?
69. Which is the most attractive promotion that makes you purchase soft drink?

### 3.6 Content Validity and Reliability

The survey examines to two significant aspects, which are content validity and reliability to make sure that the respondents have a same frequent understanding of questionnaire. After that they can retort based on reality, emotion and knowledge as statistical reliability of the questionnaire.

### 3.6.1 Content Validity

Each questions be on questionnaires are from previous works and literature. Even though the writer submitted this questionnaire to an independent study advisor and five experienced experts who have experience in related field in order to make sure content validity.

1. Mr. Nadim Xavier Salhani, CEO at Mudman Limited
2. Mr. Alex Selwyn Rajkumar T, Representative at St. John Freight System Pte.Ltd.
3. Mr. Shivendra Kumar Jaiswal, International Sales Manager at Femina lace International Company Limited.
4. Miss Preedaporn Uamurai, Marketing Officer at KF Foods Limited.
5. Miss Nutthanun Khantichaikajohn, Sales Executive at DEP Engineering.

To establish the constancy of questions, the researcher uses Index of Item Objective Congruence (IOC) method to calculate the consistency between the objective and content or questions and objective.

$$
\mathrm{IOC}=\frac{\Sigma \mathrm{R}}{N}
$$

$$
\begin{aligned}
& \text { Where } \quad \begin{aligned}
\text { IOC }= & \text { consistency between the objective and content or } \\
& \text { questions and objective. } \\
\Sigma \mathrm{R}= & \text { total assessment points given from all qualified } \\
& \quad \text { experts. } \\
\mathrm{N}= & \text { number of qualified experts. }
\end{aligned}
\end{aligned}
$$

The consistency index value must have the value 0.5 or above to be accepted. After measurement result, the questions have misused and have adapted to make sure that each question has the constancy index value more than 0.5 . Therefore,

$$
\begin{aligned}
I O C & =\frac{62.8}{69} \\
& =0.910
\end{aligned}
$$

According to IOC result of 30 questions on this questionnaire has value index of item objective congruence (IOC) equal to 0.910 without any question that has IOC index less than 0.5 . Thus, all questions are reasonable.

### 3.6.2 Reliability

The researcher chooses the questionnaire to samples as a show experiment to examine the questionnaire's reliability. In this research, the reliability test processes on SPSS statistic program by using Cronbach's alpha coefficient.

Table 3.6: Criteria of reliability

| Cronbach's alpha <br> coefficient | Reliability level | Desirability level |
| :--- | :--- | :--- |
| $0.80-1.00$ | Very high | Excellent |
| $0.70-0.79$ | High | Good |
| $0.50-0.69$ | Medium | Fair |
| $0.30-0.49$ | Low | Poor |
| Less than 0.30 | Very low | Unacceptable |

Source: Vanibuncha, K. (2003). Statistical analysis: statistics for management and research. Thailand: Department of Statistic Faculty of Chulalongkon University.

Meanwhile, Cronbach's alpha coefficient is more than 0.70 , therefore, the questionnaire reliability is acceptable (Cronbach, 1951; Olorunniwo el al., 2006).

Table 3.7: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Factors

| All Variables | Cronbach's Alpha |
| :---: | :---: |
| All part | .901 |
| Product | .891 |
| Price | .882 |
| Place | .906 |
| Promotion | .893 |
| Packaging | .878 |
| Cultural Factors | .885 |
| Social Factors | .888 |
| Personal Factors | .884 |
| Psychological Factors | .885 |
| Brand Effects | .914 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of factor is 0.901 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.8: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Product

| All Variables (product) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .773 |
| Brand name | .710 |
| Product quality (taste \& flavour) | .719 |
| Product variety | .713 |
| Availability of convenient size | .729 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of product is 0.773 . So the result shows that the reliability level is high with good desirability level.

Table 3.9: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Price

| All Variables (price) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .805 |
| Competitive Price | .745 |
| Cheaper than its competitors | .733 |
| Good Value | .718 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.805 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.10: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Place

| All Variables (place) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .850 |
| Accessibility | .728 |
| Merchandising Display | .880 |
| Convenient hours | .763 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.850 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.11: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Promotion

| All Variables (promotion) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .828 |
| Discount | .820 |
| Cash coupons or gift vouchers | .772 |
| Attractive advertisement | .778 |
| Brand endorsements by celebrities | .758 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.828 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.12: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Packaging

| All Variables (packaging) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .835 |
| Trendy Packaging | .800 |
| Appealing logo | .776 |
| Creative slogans | .761 |
| Variety of size | .823 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.835 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.13: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Cultural Factors

| All Variables (Cultural Factors) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .890 |
| Culture and social environment | .829 |
| Subculture (Regional sub cultural <br> differences | .833 |
| Social classes | .902 |
| Cultural trends | .870 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.890 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.14: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Social Factors

| All Variables (Social Factors) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .895 |
| Family | .869 |
| Social roles and status | .774 |
| Peer effects | .903 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.895 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.15: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Personal Factors

| All Variables (Personal Factors) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .808 |
| Age and way of life | .766 |
| Purchasing power and revenue | .714 |
| Lifestyle | .766 |
| Personality and self-concept | .789 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.808 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.16: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Psychological Factors

| All Variables (Psychological Factors) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .880 |
| Motivation | .831 |
| Perception | .822 |
| Learning | .828 |
| Beliefs and attitudes | .894 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.880 . So the result shows that the reliability level is very high with excellent desirability level.

Table 3.17: The Result of Cronbach's Alpha Test with pre-test for 30 respondents: Brand Effects

| All Variables (Brand Effects) | Cronbach's Alpha |
| :---: | :---: |
| All Parts | .913 |
| Brand awareness | .897 |
| Brand identity(Brand image) | .880 |
| Brand personality(unique <br> characteristics of that brand) | .908 |
| Brand loyalty(loyalty towards one <br> brand) | .880 |
| Brand relevance(Brand importance or <br> purpose) | .899 |

The value of Cronbach's alpha coefficient of the 30 pre-test questionnaire of price is 0.913 . So the result shows that the reliability level is very high with excellent desirability level.

### 3.7 Data Collection

The data has been collected from February-April of 2016 in 4 districts of Bangkok (Rat Burana, Chom thong, Thungkhru and Thonburi). Some related correlation data and related statistical function were conducted and analyzed through SPSS.

In this study, data used within this research comprise of two types of data which are primary data and secondary data.

1. Primary Data are data received form questionnaire instruments that has been self-administered by sample group which are customers
2. Secondary Data are information that has been collected, analyzed and organized throughout this research from the review of literature in related topics such as international journal, local journal, articles, books, research and the Internet.

Data collection process has been done in the month of February - April, 2016 by distributing a self-administered questionnaire to sample group in 4 districts of Bangkok such as shopping centers, convenient stores, hypermarket and supermarket.

### 3.8 Statistics for Data Analysis

Data analyzing process for this research is processed on a computer program and presented on a format of table of content along with description on each table. As for the statistic for data analysis, the author use; multinomial logistic regression

1. Using Multinomial Logistic Regression method to analyze the factors which can influence Consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand because it is a statistical technique that permits to forecast the score of one variable on the basis of their scores on several other variables. In additional, this statistics can identify a set of forecaster
variables along with giving a useful estimation of a participant's score on a criterion variable.
2. Demographic data which consist of gender, marital status, age, highest level of education, occupation and monthly income level and consumer behavior by using crosstab to analyze.

## CHAPTER 4 <br> RESEARCH FINDINGS AND DATA ANALYSIS

In this chapter, the researcher presents the analytical results in each part which is to categorize related factors that effect on the consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) through SPSS program by using 400 respondents' data based on the conceptual framework.

As a result of analysis, the data is presented in separated parts which are follows:
4.1: The Analytical Result of Hypothesis Testing by using multinomial logistic regression to study the influential in marketing mix (4ps) ,cultural factors ,social factors, personal factors, and psychological factors.
4.2: The Analytical Result of Crosstab Method for Demographic and Consumer Behavior
4.1 The Analytical Result of Hypothesis Testing by using multinomial logistic regression to study the influential in marketing mix (4ps) ,cultural factors ,social factors, personal factors, and psychological factors.
Table 4.1: Multinomial of Marketing Mix (4ps), Cultural factors, Social factors, Personal factors and Psychological factors (7 Likert Scale).

| Effect | Model Fitting Criteria | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Marketing Mix ( 4Ps) |  |  |  |  |
| 1. Product | 259.405a | 7.739 | 14 | . 902 |
| 2. Price | 301.241a | 49.575 | 14 | . 000 |
| 3. Place | 370.756a | 119.090 | 14 | . 000 |

Table 4.1(Continued): Multinomial of Marketing Mix (4ps), Cultural factors, Social factors, Personal factors and Psychological factors (7 Likert Scale)

|  | Model Fitting <br> Criteria | Likelihood Ratio Tests |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Effect | -2 Log Likelihood <br> of Reduced Model | Chi-Square | df | Sig. |
| 4. Promotion | 362.192 a | 110.526 | 14 | .000 |
| 5. Packaging | 288.431 a | 36.765 | 14 | .001 |
| 6. Brand effects | 306.223 a | 54.557 | 14 | .000 |
| 7. Cultural factors | 278.491 a | 26.825 | 14 | .020 |
| 8. Social factors | 367.353 a | 115.687 | 14 | .000 |
| 9. Personal factors | 289.495 a | 37.830 | 14 | .001 |
| 10. Psychological factors | 362.802 a | 111.136 | 14 | .000 |

According to the table 4.1, there are ten variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand (p-value < .05).

The variables that significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Price (0.000), Place (0.000), Promotion (0.000), Packaging (0.001), Social factors (0.000), Personal factors (0.001), Psychological factors ( 0.000 ), Brand effects ( 0.000 ) excepting Product ( 0.902 ) and Cultural factors (0.020).

Therefore, the hypothesis can explain as following.

- $\mathrm{H} 1_{0}$ : Product does not influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand.
- $\quad \mathrm{H} 2_{\mathrm{a}}$ : Price significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ ).
- H3a: Place significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\quad \mathrm{H} 4_{\mathrm{a}}$ : Promotion significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- $\mathrm{H5}_{\mathrm{a}}$ : Packaging is not as strong as others but still significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (0.001<0.05)
- H6 a : Brand effects significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H7 ${ }_{\mathrm{o}}$ : Cultural factors is not as strong as others but still significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (0.02<0.05)
- $\quad \mathrm{H} 8 \mathrm{a}$ : Social factors significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- $\quad \mathrm{H} 9$ a: Personal factors is not as strong as others but still significantly influences consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (0.001<0.05)
- $\quad \mathrm{H}_{1} \mathrm{a}$ : Psychological factors significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )

Table 4.2: Multinomial of Marketing Mix (4Ps) (5 Likert Scale)

| Effect | Model Fitting Criteria | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Product |  |  |  |  |
| Brand name | $405.747^{\text {a }}$ | 44.378 | 6 | . 000 |
| Product quality | $395.752^{\text {b }}$ | 34.383 | 6 | . 000 |
| Product variety | $374.282^{\text {a }}$ | 12.913 | 8 | . 115 |
| Availability of convenient size | $404.406^{\text {a }}$ | 43.037 | 6 | . 000 |
| Price |  |  |  |  |
| Competitive price | $406.650^{\text {a }}$ | 45.281 | 6 | . 000 |
| Cheaper than its competitors | 415.999 | 54.630 | 8 | . 000 |
| Good value | $423.818^{\text {a }}$ | 62.449 | 8 | . 000 |
| Place |  |  |  |  |
| Accessibility | $377.712^{\text {a }}$ | 16.343 | 6 | . 012 |
| Merchandising display | $412.578^{\text {a }}$ | 51.209 | 8 | . 000 |
| Convenient hours | 409.528 | 48.159 | 6 | . 000 |
| Promotion |  |  |  |  |
| Discount | $1227.017^{\text {b }}$ | 865.648 | 6 | . 000 |
| Cash coupons | $410.241^{\text {a }}$ | 48.872 | 8 | . 000 |
| Attractive advertisement | $416.215^{\text {a }}$ | 54.846 | 8 | . 000 |
| Brand endorsement | 402.946 | 41.577 | 8 | . 000 |
| Packaging |  |  |  |  |
| Trendy packaging | $337.839^{\text {a }}$ |  | 6 |  |
| Variety of size | 424.107 | 62.738 | 8 | . 000 |

(Continued)

Table 4.2(Continued): Multinomial of Marketing Mix (4Ps) (5 Likert Scale)

| Model Fitting <br> Cfiteria | Likelihood Ratio Tests |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood <br> of Reduced Model | Chi-Square | df | Sig. |
|  | $429.782^{\mathrm{a}}$ | 68.413 | 8 | .000 |
|  | $426.833^{\mathrm{a}}$ | 65.465 | 8 | .000 |
| Creative slogans |  |  |  |  |

According to the table 4.2, there are eighteen variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand (p-value < .05).

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Brand name (0.000), Product quality (0.000), Availability of convenient size ( 0.000 ), Competitive price ( 0.000 ), Cheap than its competitors (0.000), Good value (0.000), Merchandising display (0.000), Convenient hours (0.000), Discount (0.000), Cash coupons (0.000), Attractive advertisement (0.000), Brand endorsement ( 0.000 ), Variety of size ( 0.000 ), Appealing logo ( 0.000 ), Creative slogan ( 0.000 ) except Product variety ( 0.0115 ), Accessibility ( 0.012 ) and Trendy packaging(Data point is not enough, need more data for future research)

Therefore, the hypothesis can clarify as shown the table following.

- H1.1a: Brand name significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H1.2a: Product quality significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H1.3: Product variety does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H1.4a Availability of convenient size significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H2.1a: Competitive price significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\quad \mathrm{H} 2.2_{\mathrm{a}}$ : Cheaper than its competitors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H2.3a: Good value significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H3.1. : Accessibility does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H3.2a: Merchandising Display significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H3.3a: Convenient hours significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H4.1 ${ }_{\mathrm{a}}$ : Discount significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H4.2a: Cash coupons or gift vouchers significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\quad \mathrm{H} 4.3_{\mathrm{a}}$ : Attractive advertisements significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H4.4a: Brand endorsements by celebrities significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H5.10: Trendy Packaging does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.(as the data point is not enough, need more data for future research)
- H5.2a: Appealing logo significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H5.3a: Creative slogans significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H5.4a: Variety of size significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )

Table 4.3: Multinomial of Brand Effects (5 Likert Scale)

| Effect <br>  | Model Fitting <br> Criteria | Likelihood Ratio Tests |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2 Log Likelihood <br> of Reduced Model | Chi-Square | df | Sig. |
|  | 406.178 | 13.808 | 8 | .087 |
|  | 405.770 | 13.399 | 8 | .099 |
| Brand identity | 417.555 | 25.184 | 8 | .001 |
| Brand personality | 422.720 | 30.350 | 8 | .000 |
| Brand loyalty | 419.411 | 27.041 | 8 | .001 |
| Brand relevance |  |  |  |  |

According to the table 4.3, there are five variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (P-value < .05)

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Brand personality (0.001), Brand loyalty (0.000), Brand relevance ( 0.001 ) except Brand awareness ( 0.087 ) and Brand identity (0.099).

Therefore, the hypothesis can clarify as shown the table following.

- H6.1 ${ }_{\mathrm{o}}$ : Brand awareness does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H6.2. Brand identity does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H6.3a: Brand personality significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.001<0.05$ )
- H6.4a: Brand loyalty significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H6.5a: Brand relevance significantly influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.001<0.05)

Table 4.4: Multinomial of Cultural Factors (5 Likert Scale)

| Effect | Model Fitting <br> Criteria | Likelihood Ratio Tests |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood <br> of Reduced Model | Chi-Square | df | Sig. |
|  | $414.044^{\mathrm{a}}$ | 40.322 | 8 | .000 |
|  | $412.564^{\mathrm{a}}$ | 38.843 | 8 | .000 |
| Subculture | $398.035^{\mathrm{a}}$ | 24.314 | 6 | .000 |
| Social classes | $388.687^{\mathrm{a}}$ | 14.965 | 6 | .021 |
| Cultural trends |  |  |  |  |

According to the table 4.4 , there are four variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (P-value < .05)

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Culture and social environment (0.000), Subculture ( 0.000 ), Social classes ( 0.000 ) except Culture trends ( 0.021 ).

Therefore, the hypothesis can clarify as shown the table following.

- H7.1 $1_{\mathrm{a}}$ : Culture and social environment significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H7.2a: Subculture (Regional sub cultural differences) significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H7.3a: Social classes significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H7.4 : Cultural trends does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

Table 4.5: Multinomial of Social Factors (5 Likert Scale)

| Model Fitting <br> Criteria | Likelihood Ratio Tests |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood <br> of Reduced Model | Chi-Square | df | Sig. |
|  | $384.662^{\mathrm{a}}$ | 10.940 | 8 | .205 |
|  | $411.142^{\mathrm{a}}$ | 37.421 | 6 | .000 |
| Social role and status | $384.513^{\mathrm{a}}$ | 10.792 | 6 | .095 |
| Peer effects |  |  |  |  |

According to the table 4.5 , there are three variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (P-value < .05)

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Social role and status (0.000) excepting Family (0.205) and Peer effects (0.095).

Therefore, the hypothesis can clarify as shown the table following.

- H8.10: Family does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H8.2 ${ }_{\mathrm{a}}$ : Social roles and status significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H8.3. Peer Effects does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.

Table 4.6: Multinomial of Personal Factors (5 Likert Scale)

| Personal factors | Model Fitting Criteria | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Personal factors |  |  |  |  |
| Age and way of life | 395.414 | 21.693 | 8 | . 006 |
| Purchasing power | $385.922^{\text {a }}$ | 12.200 | 8 | . 142 |
| Lifestyle | 436.571 | 62.849 | 8 | . 000 |
| Personality and self-concept | 410.625 | 36.904 | 6 | . 000 |

According to the table 4.6, there are four variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (P-value < .05)

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Lifestyle (0.000), Personality and self-concept (0.000) except Age and way of life (0.006) and Purchasing power (0.142).

Therefore, the hypothesis can clarify as shown the table following.

- H9.10: Age and way of life does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H9.20: Purchasing power and revenue does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand
- H9.3a: Lifestyle significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H9.4a: Personality and self-concept significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )

Table 4.7: Multinomial of Psychological Factors (5 Likert Scale)

| Psychological Factors | Model Fitting Criteria | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | -2 Log Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Psychological Factors |  |  |  |  |
| Motivation | $380.545^{\text {a }}$ | 6.823 | 6 | . 337 |
| Perception | $390.950^{\text {a }}$ | 17.229 | 6 | . 008 |
| Learning | $403.826^{\text {a }}$ | 30.105 | 8 | . 000 |
| Beliefs and attitudes | $384.850^{\text {a }}$ | 11.129 | 6 | . 084 |

According to the table 4.7, there are four variables significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. (P-value < .05)

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Learning (0.000) excepting Motivation (0.337), Perception (0.008) and Beliefs and attitudes (0.084).

Therefore, the hypothesis can clarify as shown the table following.

- $\quad \mathrm{H} 10.1_{\mathrm{o}}$ : Motivation does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H10.2 $2_{0}$ : Perception does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.
- H10.3a: Learning significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H10.4: Beliefs and attitudes does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.


## 4.2: The Analytical Result of Crosstab Method for Demographic and Consumer Behavior

Table 4.8: The Crosstab analysis: Gender (Demographic)

| Gender |  | Brand Preference |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Coke | Pepsi | Est |  |
| Male | 52 | 42 | 29 | 123 |
| Female | 171 | 83 | 23 | 277 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.8, the result can be analyzed as following.

- The majority frequency of gender by the respondents are female (277) and followed by male (123) respectively.
- The most respondents of Coke are female (171).
- The most respondents of Pepsi are female (83).
- The most respondents of Est are male (29)

Table 4.9: The Crosstab analysis: Marital Status (Demographic)

| Marital Status |  | Brand Preference |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Coke | Pepsi | Est |  |
| Single | 139 | 79 | 30 | 248 |
| Married | 73 | 40 | 19 | 132 |
| Divorced | 11 | 4 | 2 | 17 |
| Widowed | 0 | 2 | 1 | 3 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.9, the result can be analyzed as following.

- The majority frequencies of marital status by the respondents are single (248) and followed by married (132), divorced (17) and widowed (3) respectively.
- The most respondents of Coke are single (139).
- The most respondents of Pepsi are single (79).
- The most respondents of Est are single (30).

Table 4.10: The Crosstab analysis: Age (Demographic)

| Age | Brand Preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Less than 16 years | 6 | 6 | 11 | 23 |
| 16-20 Years | 13 | 6 | 4 | 23 |
| 21-25 Years | 57 | 29 | 7 | 93 |
| 26-30 Years | 57 | 38 | 11 | 106 |
| 31-35 Years | 59 | 26 | 13 | 98 |
| More than 35 Years | 31 | 20 | 6 | 57 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.10, the result can be analyzed as following.
The majority frequency of age by the respondents are 26-30 Years (106) and followed by 31-35 Years (98), 21-25 Years (93), More than 35 Years (57) and Less than 16 years and 16-20 Years (23) respectively.

- The most respondents of Coke are people who have age between 31-35 Years (59).
- The most respondents of Pepsi are people who have age between 26-30 Years (38).
- The most respondents of Est are people who have age between 31-35 Years (13).

Table 4.11: The Crosstab analysis: Highest level of Education (Demographic)

| Education | Brand Preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Primary/Middle school | 4 | 5 | 0 | 25 |
| High School or equal | 10 | 8 | 7 | 32 |
| Diploma/College | 10 | 15 | 7 | 32 |
| Bachelor's Degree | 96 | 53 | 16 | 165 |
| Master's Degree | 102 | 38 | 22 | 162 |
| Doctoral Degree | 1 | 5 | 0 | 6 |
| Other | 0 | 1 | 0 | 1 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.11, the result can be analyzed as following.

- The majorities of education level of the respondents are Bachelor's Degree (165) and followed by Master's Degree (162), Diploma/College (32), High School or equal (25), Primary/Middle school (9), Doctoral Degree (6) and Other(1) respectively.
- The most respondents of Coke graduated in Master's Degree (102).
- The most respondents of Pepsi graduated in Bachelor's Degree (53).
- The most respondents of Est graduated in Master's Degree (22).

Table 4.12: The Crosstab analysis: Occupation (Demographic)

| Occupation | Brand Preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Business Owner | 20 | 23 | 6 | 49 |
| Housewife | 6 | 3 | 0 | 9 |
| Student | 48 | 26 | 20 | 94 |
| Full time worker | 93 | 53 | 22 | 168 |
| Government worker | 36 | 14 | 1 | 51 |
| No Job | 4 | 5 | 1 | 10 |
| Other | 16 | 1 | 2 | 19 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.12, the result can be analyzed as following.

- The majority frequency of occupation by the respondents are Full time worker (168) and followed by Student (94), Government worker (51), Business Owner (49), other (19), No Job (10) and Housewife (9) respectively.
- The most respondents of Coke are Full time worker (93).
- The most respondents of Pepsi are Full time worker (53).
- The most respondents of Est are Full time worker (22).

Table 4.13: The Crosstab analysis: Monthly Income (Demographic)

| Monthly Income | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Below 15,000 Baht | 49 | 23 | 12 | 84 |
| 15,001-30,000 Baht | 86 | 43 | 10 | 139 |
| $30,001-50,000$ Baht | 31 | 24 | 13 | 68 |
| 50,001-80,000 Baht | 23 | 19 | 13 | 55 |
| $80,000-100,000$ Baht | 29 | 5 | 4 | 38 |
| More than 100,000 Baht | 5 | 11 | 0 | 16 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.13, the result can be analyzed as following.

- The majority frequency of monthly income by the respondents have monthly income 15,000-30,000 Baht (139) followed by Below 15,000 Baht (84), 30,001-50,000 Baht (68), 50,001-80,000 Baht (55), 80,000-100,000 Baht(38) and More than 100,000 Baht (16) respectively.
- The most respondents of Coke have monthly income between 15,001-30,000 Baht (86).
- The most respondents of Pepsi have monthly income between 15,001-30,000 Baht (43).
- The most respondents of Est have monthly income between 30,001-50,000 Baht and 50,001-80,000 Baht (13).

Table 4.14: The Crosstab analysis: Most Common place to purchase soft drinks

| Common place |  | Brand Preference |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Coke | Pepsi | Est | 212 |
| Convenient store | 143 | 62 | 7 |  |
| Hypermarket | 40 | 29 | 17 | 79 |
| Supermarket | 26 | 26 | 27 | 23 |
| Others | 14 | 8 | 1 | 23 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.14, the result can be analyzed as following.

- The majority frequency of Most Common place to purchase soft drinks by the respondents is convenient store (212) and followed by Hypermarket (86), Supermarket (79), and Others (23) respectively.
- The most respondents of Coke prefer to buy carbonated soft drink which is convenient store (143).
- The most respondents of Pepsi prefer to buy carbonated soft drink which is convenient store (62).
- The most respondents of Est prefer to buy carbonated soft drinks which is Supermarket (27).

Table 4.15: The Crosstab analysis: Frequency of consuming soft drinks

| Frequency of consuming soft <br>  <br> drinks | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Almost Everyday | 20 | 6 | 11 | 37 |
| 1-2 times a week | 72 | 43 | 6 | 121 |
| 3-5 times a week | 61 | 37 | 21 | 119 |
| A few times in a month | 47 | 28 | 12 | 87 |
| Never or almost never | 23 | 11 | 5 | 36 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.15, the result can be analyzed as following.

- The majority frequency of consuming carbonated soft drink by the respondents is 1-2 times a week (121), followed by 3-5 times a week (119), A few times in a month (87), Almost Every day (37) and Never or almost never (36) respectively.
- The most respondents of Coke who consume carbonated soft drink is 1-2 times a week (72).
- The most respondents of Pepsi who consume carbonated soft drink is 1-2 times a week (43).
- The most respondents of Est who consume carbonated soft drink is 3-5 times a week (21).

Table 4.16: The Crosstab analysis: Frequency of visiting store to purchase carbonated soft drink

| Frequency of visiting store to <br>  <br> purchase | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Coke | Pepsi | Est | 23 |
| Everyday | 7 | 5 | 11 | 27 |
| $5-6$ times a week | 12 | 9 | 6 | 27 |

Table 4.16 (Continued): The Crosstab analysis: Frequency of visiting store to purchase carbonated soft drink

| Frequency of visiting store to <br>  <br> purchase | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| 3-4 times a week | 41 | 26 | 10 | 105 |
| 2-3 times a week | 56 | 37 | 12 | 95 |
| Once a week | 67 | 23 | 5 | 73 |
| Once a month | 40 | 25 | 8 | 400 |
| Total | 223 | 125 | 52 |  |

According to the table 4.16, the result can be analyzed as following.
The majority frequency of average number of times to visit store to purchase carbonated soft drink by the respondents is 2-3 times a week (105) and followed by Once a week (95), 3-4 times a week (77), Once a month (73), 5-6 times a week (27), and Every day (23) respectively.

- The most respondents of Coke who visit store to purchase carbonated soft drink is once a week (67).
- The most respondents of Pepsi who visit store to purchase carbonated soft drink is 2-3 times a week (37).
- The most respondents of Est who visit store to purchase carbonated soft drink is 2-3 times a week (12).

Table 4.17: The analysis of Crosstab: Pack size of carbonated soft drinks normally purchased

| Pack size of carbonated <br> soft drinks normally <br> purchased | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est | Total |
| 325 ml in can | 84 | 44 | 4 | 132 |
| 550 ml in bottle | 66 | 28 | 17 | 111 |

Table 4.17 (Continued): The analysis of Crosstab: Pack size of carbonated soft drinks normally purchased

| Pack size of carbonated <br> soft drinks normally <br> purchased | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est | Total |
| 1.25 liters in bottle | 52 | 44 | 11 |  |
| 1.45 liters in bottle | 16 | 3 | 9 | 28 |
| 2 liters in bottle | 5 | 6 | 11 | 22 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.17, the result can be analyzed as following.

- The majority frequency of pack size of carbonated soft drinks normally purchased by the respondents is 325 ml in can (132) and followed by 550 ml in bottle (111), 1.25 liters in bottle (107), 1.45 liters in bottle (28) and 2 liters in bottle (22) respectively.
- The most respondents of Coke prefer the pack size purchase of carbonated soft drink which is 325 ml in can (84).
- The most respondents of Pepsi prefer the pack size purchase of carbonated soft drink which is 325 ml in can and 1.25 l in bottle (44).
- The most respondents of Est prefer the pack size purchase of carbonated soft drink which is 550 ml in bottle (17).

Table 4.18: The analysis of Crosstab: Amount of carbonated soft drinks consumed per time

| Amount of carbonated soft <br> drinks consumed per time | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| 550 ml | 122 | 70 | 19 | 211 |
| 1 liters | 47 | 30 | 14 | 91 |
| 1.25 liters | 45 | 21 | 12 | 78 |
| 2 liters | 9 | 4 | 7 | 20 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.18, the result can be analyzed as following.

- The majority frequency of amount of carbonated soft drinks consumed per time by the respondents is 550 ml (211) and followed by 1 liters (91), 1.25 liters (78), and 2 liters (20) respectively.
- The most respondents of Coke prefer for consuming carbonated soft drink is 550 ml (122).
- The most respondents of Pepsi prefer for consuming carbonated soft drink is 550 ml (70).
- The most respondents of Est prefer for consuming carbonated soft drink is 550 ml (19).

Table 4.19: The analysis of Crosstab: Other brands normally consumed other than Coke, Pepsi or Est

| Other bands normally <br> Consumed other than <br> Coke, Pepsi or Est | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est | Total |
| Sprite | 89 | 43 | 12 |  |
| Fanta | 89 | 45 | 27 | 161 |
| Mountain Dew | 37 | 23 | 9 | 69 |
| 7 up | 8 | 14 | 4 | 26 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.19, the result can be analyzed as following.
The majority frequency of Other brands normally consumed other than Coke, Pepsi or Est by the respondents are Fanta (161), followed by Sprite (144),

Mountain Dew (69) and 7 up (26) respectively.

- The most respondents of Coke prefer to consume other brand which is Fanta and Sprite (89).
- The most respondents of Pepsi prefer to consume other brand which is Fanta (45).
- The most respondents of Est prefer to consume other brand which is Fanta (27).

Table 4.20: The analysis of Crosstab: Reason for drinking carbonated soft drink

| Reason for drinking <br> carbonated soft drink | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Taste | 56 | 35 | 7 | 98 |
| Energy | 31 | 16 | 11 | 58 |
| Refreshment | 117 | 64 | 24 | 205 |
| Passion | 19 | 10 | 10 | 39 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.20, the result can be analyzed as following.

- The majority frequency for the reason for drinking carbonated soft drink is Refreshment (205), followed by Taste (98), Energy (58) and Passion (39) respectively.
- The most respondents of Coke have the reason of drinking carbonated soft drink is Refreshment (117).
- The most respondents of Pepsi have the reason of drinking carbonated soft drink is Refreshment (64).
- The most respondents of Est have the reason of drinking carbonated soft drink is Refreshment (24).

Table 4.21: The Crosstab analysis: Factors that influence to drink a carbonated soft drink

| Factors that influence to drink a <br> carbonated soft drink | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Friends | 75 | 25 | 8 | 108 |
| Family | 49 | 28 | 9 | 86 |
| Lifestyle | 89 | 55 | 29 | 173 |
| Culture trends | 7 | 9 | 6 | 22 |
| Commercial Advertisement | 3 | 8 | 0 | 11 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.21, the result can be analyzed as following.

- The majority frequency of Factors that influence to drink a carbonated soft drink by the respondents is Lifestyle (173) and followed by Friends (108), Family (86), Culture trends (22) and Commercial Advertisement (11) respectively.
- The most respondents of Coke choose the factor that influence to drink a carbonated soft drink is Lifestyle (89).
- The most respondents of Pepsi choose the factor that influence to drink a carbonated soft drink is Lifestyle (55).
- The most respondents of Est choose the factor that influence to drink a carbonated soft drink is Lifestyle (29).

Table 4.22: The Crosstab analysis: Reason for preferring to drink a particular brand

| Reason for preferring to drink a <br>  <br> particular brand | Brand preference |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est |  |
| Refreshing taste | 127 | 64 | 12 | 27 |
| Attractive Packaging | 22 | 15 | 11 | 48 |
| Attractive Promotion | 21 | 13 | 14 | 48 |
| Availability of convenient size | 4 | 9 | 7 | 20 |
| Convenient to buy | 37 | 11 | 8 | 56 |
| Brand Image | 12 | 13 | 0 | 25 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.22, the result can be analyzed as following.

- The majority frequencies of Reason for preferring to drink a particular brand by the respondents are Refreshing taste (203) and followed by Convenient to buy (56), Attractive Packaging (48) and Attractive Promotion (48), Brand Image (25) and Availability of convenient size (20) respectively.
- The most respondents of Coke prefer to drink a particular brand due to its Refreshing taste (127).
- The most respondents of Pepsi prefer to drink a particular brand due to its is Refreshing taste (64).
- The most respondents of Est prefer to drink a particular brand due to its Attractive promotion (14).

Table 4.23: The Crosstab analysis: other brand preferred if can't find the favorite brand

| other brand preferred if can't <br> find the favorite brand | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | coke | Pepsi | Est |  |
| Coke | - | 51 | 14 | 65 |
| Pepsi | 74 | - | 23 | 97 |
| Est | 38 | 20 | - | 58 |
| Others | 36 | 11 | 0 | 47 |
| Total | 148 | 82 | 37 | 267 |

According to the table 4.23, the result can be analyzed as following.
The majority frequency of other brand preferred if can't find the favorite brand

- $\quad$ is Pepsi (97) and Coke (65), followed by Est (58) and Others (47) respectively.
- The most respondents of Coke prefer in other carbonated drink brands is Pepsi (51).
- The most respondents of Pepsi prefer in other carbonated drink brands is Coke (74).
- The most respondents of Est prefer in other carbonated drink brands is Coke (38).

Table 4.24: The Crosstab analysis: Can identify the difference in taste among the three brands

| Can identify the difference in <br> taste among the three brands | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est | Total |
| Yes | 154 | 77 | 26 |  |
| No | 36 | 22 | 6 | 64 |
| Not sure | 33 | 26 | 20 | 79 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.24, the result can be analyzed as following.

- The majority frequency of Identification of difference in taste among the three brands (Coke, Pepsi and Est) by the respondents is Yes (257) and followed by Not sure (79) and No (64) respectively.
- The most respondents of Coke can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (154).
- The most respondents of Pepsi can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (77).
- The most respondents of Est can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (26).

Table 4.25: The Crosstab analysis: Getting another brand in spite of ordering a specific brand

| Getting another brand in spite <br> of ordering a specific brand | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Coke | Pepsi | Est | Total |
| I will ask to change it | 116 | 73 | 30 | 219 |
| I will not ask anything and <br> will drink it. | 107 | 52 | 22 | 181 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.25, the result can be analyzed as following.
The majority frequency of getting another brand in spite of ordering a specific brand
by the respondents are I will ask to change it (219) and followed by I will not ask anything and will drink it. (181) respectively.

- The most respondents of Coke for getting another brand which an answer is I will ask to change it (116).
- The most respondents of Pepsi for getting another brand which an answer is I will ask to change it (73).
- The most respondents of Est for getting another brand which an answer is I will ask to change it (30)

Table 4.26: The Crosstab analysis: Most effective advertising that makes you want to drink a carbonated soft drink

| Most effective advertising | Brand preference |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| that makes you want to <br> drink a carbonated soft <br> drink |  |  |  |  |
| Commercials | Coke | Pepsi | Est | Total |
| Web advertising | 135 | 66 | 35 | 236 |
| Billboard | 41 | 25 | 12 | 78 |
| Print advertising | 37 | 24 | 5 | 66 |
| Total | 10 | 10 | 0 | 20 |

According to the table 4.26, the result can be analyzed as following.
The majority frequency of Most effective advertising that makes you want to drink a carbonated soft drink by the respondents are Commercials (236) and followed by Web advertising (78), Billboard (66), and Print advertising (20) respectively.

- The most respondents of Coke think that effective advertising that makes you purchase carbonated soft drink is Commercials (135).
- The most respondents of Pepsi think that effective advertising that makes you purchase carbonated soft drink is Commercials (66).
- The most respondents of Est think that effective advertising that makes you purchase carbonated soft drink is Commercials (35).

Table 4.27: The Crosstab analysis: The most attractive promotion that makes you purchases carbonated soft drink.

| The most attractive promotion <br> that makes you purchases <br> carbonated soft drink. | Brand preference |  |  | Coke |
| :--- | :---: | :---: | :---: | :---: |
|  | Pepsi | Est | 197 |  |
| Buy 1 get 1 | 116 | 59 | 22 | 14 |
| Cash discount | 52 | 27 | 93 |  |
| Buy combo pack of two in less <br> amount | 38 | 23 | 12 | 73 |
| Get more quantity in same <br> price | 17 | 16 | 4 | 37 |
| Total | 223 | 125 | 52 | 400 |

According to the table 4.27, the result can be analyzed as following.
The majorities of the most attractive promotion that makes you purchase carbonated soft drink are Buy 1 get 1 (197) and followed by Cash discount (93), Buy combo pack of two in less amount (73) and Get more quantity in same price (37) respectively.

- The most respondents of Coke purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (116).
- The most respondents of Pepsi purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (59).
- The most respondents of Est purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (22).


## CHAPTER 5 <br> DISCUSSION AND CONCLUSION

### 5.1 Introduction

In this chapter, the researcher summarized the analytical results for hypothesis testing, by using Multinomial logistic regression of marketing mix 4Ps (product, price, place, promotion including packaging and Brand effects) Cultural factors, Social factors, Personal factors, Psychological factors and Consumer Behavior factors influencing consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand.

This research will be useful for carbonated soft drink companies to understand and improvise their marketing strategies by knowing the important factors that influences brand choice decisions of consumers while purchasing carbonated soft drinks.

Quantitative methodology has been used for doing this research, by distributing questionnaires to people who consume carbonated soft drinks (mainly Coke, Pepsi and Est) in four districts of Bangkok. The independent variables designed in this questionnaire which influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand are Brand preference, Marketing mix (4P's) data, Brand effects, demographics, Factors affecting in making brand choice decision, and consumer behavior. Each question in questionnaire are from previous work and literature. The questionnaire has been approved and supervised by independent study advisor and five experienced experts who have experience in related field to make sure the validity of content and to pass the reliability test efficiently.

### 5.2 Conclusion

By conducting the research about the factors affecting consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand, we get the following result:

The variables that significantly influences brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand are Product (0.902), Price (0.000), Place (0.000), Promotion (0.000), Packaging (0.001), Brand Effects (0.000), Cultural Factors (0.020), Social Factors (0.000), Personal Factors (0.001), Psychological Factors (0.000). Therefore, the hypothesis explains as follows.

- $\mathrm{H} 1_{0}$ : Product does not influence consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand.(0.902 > 0.05)
- $\quad \mathrm{H} 2_{\mathrm{a}}$ : Price significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\quad \mathrm{H} 3_{\mathrm{a}}$ : Place significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\quad \mathrm{H} 4_{a}$ : Promotion significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- $\mathrm{H} 5_{\mathrm{a}}$ : Packaging significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.001<0.05$ )
- $\mathrm{H6}_{\mathrm{a}}$ : Brand effects significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )
- H7a: Cultural Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.020<0.05$ )
- $\mathrm{H}_{\mathrm{a}}$ : Social Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. (0.000<0.05)
- H9a: Personal Factors significantly influences consumer brand choice decisions in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.001<0.05$ )
- H10a: Psychological Factors significantly influences consumer brand choice decisions
in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. ( $0.000<0.05$ )

From the research of the marketing mix ( 4 P 's) which effects on consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. The result is as follows,

The variables that significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Brand name (0.000), Product quality (0.000), Availability of convenient size ( 0.000 ), Competitive price ( 0.000 ), Cheap than its competitors (0.000), Good value (0.000), Merchandising display (0.000), Convenient hours (0.000), Discount (0.000), Cash coupons (0.000), Attractive advertisement (0.000), Brand endorsement (0.000), Variety of size (0.000), Appealing logo (0.000), Creative slogan ( 0.000 ) except Product variety ( 0.0115 ), Accessibility ( 0.012 ) and Trendy packaging ( data point is not enough, need more data for future research).

From the research of the brand Effects, Cultural factors, social factors, Personal factors, Psychological factors that effect on consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. The result are as follows,

The variables which significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Brand personality (0.001), Brand loyalty (0.000), Brand relevance ( 0.001 ), Culture and social environment ( 0.000 ), Subculture ( 0.000 ), Social classes (0.000), Social role and status (0.000), Lifestyle (0.000), Personality and selfconcept (0.000), Learning (0.000) except Brand awareness (0.087), Brand identity (0.099), Culture trends (0.021), Family (0.205), Peer effects (0.095), Age and way of
life (0.006), Purchasing power (0.142), Motivation (0.337), Perception (0.008) and Beliefs and attitudes (0.084).

From the research of demographic information for consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand, the result are as follows:

- Gender, The majority frequency of gender by the respondents are female (277) and followed by male (123) respectively. The most respondents of coke are female (171). The most respondents of Pepsi are female (83). The most respondents of Est are male (29).
- Marital Status, The majority frequency of Marital status by the respondents are single (248) and followed by married (132), divorced (17) and widowed (3) respectively. The most respondents of Coke are single (139), the most respondents of Pepsi are single (79). The most respondents of Est are single (30).
- Age, The majority frequency of age by the respondents are 26-30 Years (106) and followed by 31-35 Years (98), 21-25 Years (93), more than 35 Years (57) and Less than 16 Years and 16-20 Years (23) respectively. The most respondents of Coke are people who have age between 31-35 Years (59). The most respondents of Pepsi are people who have age between 26-30 Years (38). The most respondents of Est are people who have age between 31-35 Years (13).
- Highest level of Education, The majority frequency of Highest level of education by the respondents are Bachelor's Degree (165) and followed by Master's Degree (162), Diploma/College (32), High School or equal (25), Primary/Middle school (9), Doctoral Degree (6) and Other(1) respectively. The most respondents of Coke graduated in Master's Degree (102). The most respondents of Pepsi graduated in Bachelor's Degree (53). The most respondents of Est graduated in Bachelor's Degree (22).
- Occupation, The majority frequency of occupation by the respondents are Full time worker (168) and followed by Student (94), Government worker (51), Business Owner (49), other (19), No Job (10) and Housewife (9) respectively. The most respondents of Coke are Full time worker (93). The most respondents of Pepsi are Full time worker (53). The most respondents of Est are Full time worker (22).
- Monthly Income, The majority frequency of monthly income by the respondents have monthly income 15,000-30,000 Baht (139) followed by Below 15,000 Baht (84), 30,001-50,000 Baht (68), 50,001-80,000 Baht (55), 80,000-100,000 Baht(38) and More than 100,000 Baht (16) respectively. The most respondents of Coke have monthly income between $15,001-30,000$ Baht (86). The most respondents of Pepsi have monthly income between $15,001-30,000$ Baht (43).

The most respondents of Est have monthly income between 30,001-50,000 Baht and 50,001-80,000 Baht (13).

From the research of life style and consumer behavior for consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand, the result are as follows:

- The most common place to purchase soft drinks, The majority frequency of Most Common place to purchase soft drinks by the respondents are convenient store (212) and followed by Hypermarket (86), Supermarket (79), and Others (23) respectively. The most respondents of Coke prefer to buy carbonated soft drinks from convenient store (143). The most respondents of Pepsi prefer to buy carbonated soft drinks from convenient store (62). The most respondents of Est prefer to buy carbonated soft drinks from Supermarket (27).
- Frequency of consuming carbonated soft drink, The majority frequency of consuming carbonated soft drink by the respondents is 1-2 times a week (121), followed by 3-5 times a week (119), A few times in a month (87), Almost Every day (37) and Never or almost never (36) respectively. The most respondents of Coke who consume carbonated soft drink is 1-2 times a week (72).The most respondents of Pepsi who consume carbonated soft drink is 1-2 times a week (43). The most respondents of Est who consume carbonated soft drink is 3-5 times a week (21).
- Frequency of visiting store to purchase carbonated soft drink, The majority frequency of average number of times to visit store to purchase carbonated soft drink by the respondents is 2-3 times a week (105) and followed by Once a week (95), 3-4 times a week (77), Once a month (73), 5-6 times a week (27), and Every day (23) respectively. The most respondents of Coke who visit store to purchase carbonated soft drink is once a week (67).The most
respondents of Pepsi who visit store to purchase carbonated soft drink is 2-3 times a week (37). The most respondents of Est who visit store to purchase carbonated soft drink is 2-3 times a week (12).
- Pack size of carbonated soft drinks normally purchased, The majority frequency of pack size of carbonated soft drinks normally purchased by the respondents is 325 ml in can (132) and followed by 550 ml in bottle (111), 1.25 liters in bottle (107), 1.45 liters in bottle (28) and 2 liters in bottle (22) respectively. The most respondents of Coke prefer the pack size purchase of carbonated soft drink which is 325 ml in can (84). The most respondents of Pepsi prefer the pack size purchase of carbonated soft drink which is 325 ml in can and 1.251 in bottle (44).The most respondents of Est prefer the pack size purchase of carbonated soft drink which is 550 ml in bottle (17).
- Amount of carbonated soft drinks consumed per time, The majority frequency of amount of carbonated soft drinks consumed per time by the respondents is 550 ml (211) and followed by 1 liters ( 91 ), 1.25 liters (78), and 2 liters (20) respectively. The most respondents of Coke prefer for consuming carbonated soft drink is 550 ml (122). The most respondents of Pepsi prefer for consuming carbonated soft drink is 550 ml (70). The most respondents of Est prefer for consuming carbonated soft drink is 550 ml (19).
- Other brands normally consumed other than Coke, Pepsi or Est, The majority frequency of Other brands normally consumed other than Coke, Pepsi or Est by the respondents are Fanta (161), followed by Sprite (144), Mountain Dew (69) and 7 up (26) respectively. The most respondents of Coke prefer to consume other brand which is Fanta and Sprite (89).The most respondents of Pepsi prefer to consume other brand which is Fanta (45). The most respondents of Est prefer to consume other brand which is Fanta (27).
- Reason for drinking carbonated soft drink, The majority frequency for the reason for drinking carbonated soft drink is Refreshment (205), followed by Taste (98), Energy (58) and Passion (39) respectively. The most respondents of Coke have the reason of drinking carbonated soft drink is Refreshment (117). The most respondents of Pepsi have the reason of drinking carbonated
soft drink is Refreshment (64). The most respondents of Est have the reason of drinking carbonated soft drink is Refreshment (24).
- Factors that influence to drink a carbonated soft drink, The majority frequency of Factors that influence to drink a carbonated soft drink by the respondents is Lifestyle (173) and followed by Friends (108), Family (86), Culture trends (22) and Commercial Advertisement (11) respectively. The most respondents of Coke choose the factor that influence to drink a carbonated soft drink is Lifestyle (89). The most respondents of Pepsi choose the factor that influence to drink a carbonated soft drink is Lifestyle (55).The most respondents of Est choose the factor that influence to drink a carbonated soft drink is Lifestyle (29).
- Other brand preferred if can't find the favorite brand, The majority frequency of other brand preferred if can't find the favorite brand is Pepsi (141) and Coke (139), followed by Est (73) and Others (47) respectively. The most respondents of Coke prefer in other carbonated drink brands is pepsi (75). The most respondents of Pepsi prefer in other carbonated drink brands is Coke (51). The most respondents of Est prefer in other carbonated drink brands is Pepsi (23).
- Can identify the difference in taste among the three brands, The majority frequency of Identification of difference in taste among the three brands (Coke, Pepsi and Est) by the respondents is Yes (257) and followed by Not sure (79) and No (64) respectively. The most respondents of Coke can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (154). The most respondents of Pepsi can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (77). The most respondents of Est can identify the difference in taste among the three brands (Coke, Pepsi and Est) is Yes (26).
- Getting another brand, The majority frequency of getting another brand in spite of ordering a specific brand by the respondents are I will ask to change it (219) and followed by I will not ask anything and will drink it. (181) respectively. The most respondents of Coke for getting another brand which an answer is I will ask to change it (116). The most respondents of Pepsi for
getting another brand which an answer is I will ask to change it (73). The most respondents of Est for getting another brand which an answer is I will ask to change it (30).
- Reason for preferring to drink a particular brand, The majority frequencies of Reason for preferring to drink a particular brand by the respondents are Refreshing taste (203) and followed by Convenient to buy (56), Attractive Packaging (48) and Attractive Promotion (48), Brand Image (25) and Availability of convenient size (20) respectively. The most respondents of Coke prefer to drink a particular brand due to its Refreshing taste (127). The most respondents of Pepsi prefer to drink a particular brand due to its is Refreshing taste (64). The most respondents of Est prefer to drink a particular brand due to its Attractive promotion (14).
- The most attractive promotion that makes you purchase carbonated soft drink, The majorities of the most attractive promotion that makes you purchase carbonated soft drink are Buy 1 get 1 (197) and followed by Cash discount (93), Buy combo pack of two in less amount (73) and Get more quantity in same price (37) respectively. The most respondents of Coke purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (116). The most respondents of Pepsi purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (59). The most respondents of Est purchase carbonated soft drink due to the most attractive promotion which is Buy 1 get 1 (22).
- Most effective advertising that makes you want to drink a carbonated soft drink, The majority frequency of Most effective advertising that makes you want to drink a carbonated soft drink by the respondents are Commercials (236) and followed by Web advertising (78), Billboard (66), and Print advertising (20) respectively. The most respondents of Coke think that effective advertising that makes you purchase carbonated soft drink is Commercials (135). The most respondents of Pepsi think that effective advertising that makes you purchase carbonated soft drink is Commercials (66). The most respondents of Est think that effective advertising that makes you purchase carbonated soft drink is Commercials (35).

According to the result of Coke, The demographic and consumer behavior can conclude as following:

Coke is preferred mainly by female respondents whose status is single (139), and the age group is 31-35 years, the majority frequency of education level is Master's degree with occupation as Full time worker, the majority frequency of monthly income is between $15,001-30,000$ Baht. Consumers mostly purchase coke from convenient stores, and the frequency of consuming coke is 1-2 times a week. The majority frequency of visiting store to purchase coke is once a week. Consumers normally purchase 325 ml pack size of Coke and the majority frequency of amount of coke consumed per time is 550 ml . Consumers who prefer coke they normally prefer sprite and Fanta other than coke, The majority frequency of consumers drink coke because of refreshment, the most influencing factor that makes them to drink Coke is their lifestyle. They prefer to drink coke because of its refreshing taste. If the consumers who prefer coke can't find their favorite brand they prefer to drink Pepsi, the majority frequency of people who drink Coke said yes they can identify the difference in taste. The majority frequency of consumers of coke said that if they get another brand in spite of ordering coke they will ask to change it. The most effective advertising that makes consumers drink coke is commercials and the most attractive promotion that makes consumer purchase Coke is Buy 1 get 1 offer.

According to the result of Pepsi, The demographic and consumer behavior can conclude as following:

Pepsi is preferred mainly by female respondents, whose status is single, and the age group is 26-30 years, the majority frequency of education level is Bachelor's degree with occupation as Full time worker, the majority frequency of monthly income is between 15,001-30,000 Baht. Consumers mostly purchase Pepsi from convenient stores, and the frequency of consuming Pepsi is 1-2 times a week. The majority frequency of visiting store to purchase Pepsi is 2-3 times a week. Consumers normally purchase 325 ml and 1.25 l of pack size of Pepsi and the majority frequency of amount of Pepsi consumed per time is 550 ml . Consumers who prefer Pepsi they normally prefer Fanta other than Pepsi, The majority frequency of consumers drink Pepsi because of refreshment, the most influencing
factor that makes them to drink Pepsi is their lifestyle. They prefer to drink Pepsi because of its refreshing taste. If the consumers who prefer Pepsi can't find their favorite brand they prefer to drink Coke, the majority frequency of people who drink Pepsi said yes they can identify the difference in taste. The majority frequency of consumers of Pepsi said that if they get another brand in spite of ordering Pepsi they will ask to change it. The most effective advertising that makes consumers drink Pepsi is commercials and the most attractive promotion that makes consumer purchase Pepsi is Buy 1 get 1 offer.

According to the result of Est, The demographic and consumer behavior can conclude as following:

Est is preferred mainly by male respondents whose status is single, and the age group is 31-35 years, the majority frequency of education level is Master's degree with occupation as Full time worker, the majority frequency of monthly income is between 30,001-50,000 Baht and 50,001-80,000 Baht. Consumers mostly purchase Est from supermarket, and the frequency of consuming Est is 3-5 times a week. The majority frequency of visiting store to purchase Est is 2-3 times a week. Consumers normally purchase 550 ml pack size of Est and the majority frequency of amount of Est consumed per time is 550 ml . Consumers who prefer Est they normally prefer Fanta other than coke, The majority frequency of consumers drink Est because of refreshment, the most influencing factor that makes them to drink Est is their lifestyle. They prefer to drink Est because of its Attractive Promotion. If the consumers who prefer Est can't find their favorite brand they prefer to drink Pepsi, the majority frequency of people who drink Est said yes they can identify the difference in taste. The majority frequency of consumers of Est said that if they get another brand in spite of ordering Est they will ask to change it. The most effective advertising that makes consumers drink Est is commercials and the most attractive promotion that makes consumer purchase Est is Buy 1 get 1 offer.

### 5.3 Discussion

1. The result that the variables marketing mix ( 4 P 's) that significantly influence consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand include Price, Place, Promotion, Packaging, Brand Effects, Cultural Factors, Social Factors, Personal Factors and Psychological Factors. The most preferred brand of consumers among the three carbonated soft drinks is Coke, followed by Pepsi and then Est. Coke won the cola wars due to its new product line and also its refreshing taste. coke was dependent on its larger infrastructure of soda machines and fast food tie-ins to preserve its lead ever since 1983 which was the beginning of its success. also constantly the company has focused on brand first and foremost. The most popular choice is Diet Coke today.
2. In this research the findings shows that when Pepsi is compared to Est the result shows that creative slogan has the most impact in packaging and Brand personality has the most impact in Brand Effects in making Brand choice decision because consumers today differentiate the product from the way it is presented in front of them.as it is said that slogans are the centerpiece of a company's identity if it does not interpret well it may send a wrong message and may drive customers away. Also brand personalities have a high impact on consumers when making brand choice decision because it is basically a set of unique characteristics that a brand benefits which increases its brand equity. This is the additional value besides functional benefits. Whereas, when Coke is compared to Est the result shows that culture and social environment has the most impact in cultural factors in making brand choice decision as coke has become culture bound. The social environment of today makes individuals easily influence by changing trends, beliefs and attitudes towards a brand. Also, when coke is compared to Est the result shows that Brand awareness and Brand personality has the most impact in Brand effects. This is a competitive advantage for Coke that consumers are aware of the brand and can clearly differentiate it due to its unique personality from others.
3. In terms of demographic data this research study shows that Single, female consumers of age 26-30 years old drink more carbonated soft drinks than male. On the contrary according to the research of Arunee Nakmongkol (2009) the study of consumer 's attitudes and behaviors towards carbonate soft drinks the majority drinkers are male of age 15-30 years old than female. The reason behind this difference is due to the changing cultural trends, socio- demographic characteristics and lifestyle in which women are advancing faster than men.
4. According to the research of Arunee Nakmongkol (2009) the study of consumer's attitudes and behaviors towards carbonate soft drinks, there are 6 driving factors for drinking consumption they are- Brand name, Feature/ Packaging, Formula, Price and promotion. This has been declined in this study under the following 6 factors: Price, Place, Promotion, Brand effects, Social factors and Psychological factors. These attributes are clearly identified by the consumers as Brand name only matters if its quality is unbeatable and possess unique features also Brand effects, social factors and Psychological factors have a high impact because buying decisions are always influenced by someone like family members, peers or social status due to some kind of motivation, perception or human beliefs and attitudes.

So these results present a clear picture of what are the brand choice decision factors for purchasing a particular brand of carbonated soft drink. Product in term of brand name, quality and availability, price, place in term if merchandising and convenience hours, promotion, Brand loyalty, Cultural and Personal factors are the final motivators. However it is possible to fine tune this analysis by looking at how consumer perceive their satisfaction towards these influencing factors.

### 5.4 Managerial Implication

Marketing Mix (4P’s)
From the result of Marketing Mix, The business owners can apply in their marketing plan as follows:

1. Product: The carbonated soft drink companies should emphasize on Brand name, Product quality and availability of convenient size.
2. Price: The carbonated soft drink companies should emphasize on Competitive price, cheaper than its competitors and Good value.
3. Place: The carbonated soft drink companies should emphasize on Accessibility, Merchandising display and convenient hours.
4. Promotion: The carbonated soft drink companies should emphasize on Discount, Cash coupons, Attractive advertisements and Brand endorsement.
5. Packaging: The carbonated soft drink companies should emphasize on variety of size, appealing logo and creative slogans.
6. Brand Effects: The carbonated soft drink companies should emphasize on Brand personality, Brand loyalty and Brand relevance.

From the result of Cultural, Social, Personal, Psychological factors, the business owners can apply in their marketing plan as follows:

1. Cultural Factors: The carbonated soft drink companies should emphasize on culture and social environment, subculture (Regional sub cultural differences), social classes and cultural trends.
2. Social Factors: The carbonated soft drink companies should emphasize on social role and status.
3. Personal Factors: The carbonated soft drink companies should emphasize on Lifestyle and personality and self -concept.
4. Psychological Factors: The carbonated soft drink companies should emphasize on learning.

### 5.5 Recommendation for Future Research

This research contains information about consumer brand choice decision in carbonated soft drinks in particular with Coke, Pepsi and Est (top 3 brands) in Bangkok, Thailand. In addition, consumer behavior, brand preference, brand loyalty, age, education, and monthly income of consumers are provided in this research. To expand this research, future research might look into the marketing campaigns and marketing promotions that attract customers to buy more products. Moreover, the
research found that most of the customers know the taste difference among the three soft drink brands, so future research can look into the taste detail to interpret the best taste that satisfies customers. Blind testing and comments are required in future research to collect real opinions without any interference from brand loyalty.

Furthermore, future research might investigate how a local brand can compete over other global brands by focusing on the factors that influence the success of global brands, for example, advertisement, price, loyalty, packaging, and logo, and then analyzing those factors. As people are becoming more and more health conscious nowadays so, in future research health drink may be taken as a substitute of 3 different categories of drinks such as, Coke, Oishi and juice according to the trend.

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APPENDICES

IOC RESULT

| No | Expert 1 |  |  | Expert 2 |  |  | Expert3 |  |  | Expert4 |  | Expert5 |  |  | $\begin{aligned} & \text { Total } \\ & \text { Score } \\ & \sum \mathrm{R} \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline \mathrm{IOC} \\ \sum \mathrm{R} \\ \mathrm{~N} \end{array}$ | Data <br> Analysis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 0 | -1 | 1 | 0 | -1 | 1 | 0 | -1 | 1 |  |  | 10 | -1 |  |  |  |
| 1 | $\sqrt{ }$ |  |  | $\sqrt{ }$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 2 | $\sqrt{ }$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 3 | $\sqrt{ }$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 4 | $\sqrt{ }$ |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | 3 | 0.6 | Acceptable |
| 5 | $\sqrt{ }$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 6 | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 7 | $\sqrt{ }$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | 4 | 0.8 | Acceptable |
| 8 | $\sqrt{ }$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | 4 | 0.8 | Acceptable |
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| 34 | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  | 3 | 0.6 | Acceptable |
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| 59 | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 60 | $\checkmark$ |  |  | $\checkmark$ |  | $\sqrt{ }$ |  |  | $\checkmark$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 61 | $\sqrt{ }$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | $\sqrt{ }$ |  | 5 | 1 | Acceptable |
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| 64 | $\checkmark$ |  |  | $\checkmark$ |  | $\sqrt{ }$ |  |  | $\sqrt{ }$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
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| 66 | $\checkmark$ |  |  | $\checkmark$ |  | $\sqrt{ }$ |  |  | $\checkmark$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 67 | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
| 68 | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | 5 | 1 | Acceptable |
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Where: IOC = Consistency between the objective and content or questions and objectives.
$\mathrm{IOC}=\sum \mathrm{R}$

$$
\mathrm{N}
$$

$\Sigma=$ Total assessment points given from all qualified experts.
$\mathrm{N}=$ Number of qualified experts.
Therefore, $\quad$ IOC $=\frac{62.8}{69}$

$$
=0.910
$$

The assessment result of questions on this questionnaire has value index of item objective congruence (IOC) equal to 0.91 without any question that has IOC index less than 0.5

Multinomial and Crosstab Result

## Nominal Regression




| Brand_effects | Slightly important | 88 | 22.0\% |
| :---: | :---: | :---: | :---: |
|  | Neutral | 87 | 21.8\% |
|  | Moderately important | 115 | 28.8\% |
|  | Very important | 55 | 13.8\% |
|  | Strong effect | 18 | 4.5\% |
|  | Noeffect | 22 | 5.5\% |
|  | Not at all important | 13 | 3.2\% |
|  | Less important | 5 | 1.2\% |
|  | Slightly important | 85 | 21.2\% |
|  | Neutral | 43 | 10.8\% |
|  | Moderately important | 86 | 21.5\% |
|  | very important | 92 | 23.0\% |
|  | strong effect | 54 | 13.5\% |
| Valid |  | 400 | 100.0\% |
| Missing |  | 0 |  |
| Total |  | 400 |  |
| Subpopulation |  | $192{ }^{\text {a }}$ |  |

a. The dependent variable has only one value observed in 181 (94.3\%) subpopulations.

Model Fitting Information

| Model | Model Fitting <br> Criteria | Likelihood Ratio Tests |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | -2 Log <br> Likelihood | Chi-Square |  | df |
| Sig. |  |  |  |  |
| Null | 846.484 <br> Final | 251.666 | 594.818 | 142 |

## Pseudo R-Square

| Cox and Snell | .774 |
| :--- | :--- |
| Nagelkerke | .871 |
| McFadden | .677 |

Likelihood Ratio Tests

| Effect | Model Fitting <br> Criteria | Likelihood Ratio Tests |
| :--- | :---: | :---: |


|  | -2 Log <br> Likelihood of <br> Reduced Model | Chi-Square | df | Sig. |
| :--- | ---: | ---: | ---: | ---: |
| Product | $259.405^{\mathrm{a}}$ | 7.739 | 14 | .902 |
| Price | $301.241^{\mathrm{a}}$ | 49.575 | 14 | .000 |
| Place | $370.756^{\mathrm{a}}$ | 119.090 | 14 | .000 |
| Promotion | $362.192^{\mathrm{a}}$ | 110.526 | 14 | .000 |
| Packaging | $288.431^{\mathrm{a}}$ | 36.765 | 14 | .001 |
| Brand effects | $306.223^{\mathrm{a}}$ | 54.557 | 14 | .000 |
| cultural_factors | $278.491^{\mathrm{a}}$ | 26.825 | 14 | .020 |
| Social_factors | $367.353^{\mathrm{a}}$ | 115.687 | 14 | .000 |
| Personal_factors | $289.495^{\mathrm{a}}$ | 37.830 | 14 | .001 |
| Psychological_factors | $362.802^{\mathrm{a}}$ | 111.136 | 14 | .000 |

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0 .
a. Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.

Parameter Estimates

| Brandpreference ${ }^{\text {a }}$ | B | Std. <br> Error | $\begin{aligned} & \text { w } \\ & \text { al } \\ & \text { d } \end{aligned}$ | d | d Si | $\operatorname{Exp}(\mathrm{B})$ | 95\% Confidence <br> Interval for $\operatorname{Exp}(\mathrm{B})$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Lower <br> Bound | Upper <br> Bound |
| ${ }_{\text {CProduct=0] }}$ [Product=1] | $\begin{array}{r} 61.3 \\ 02 \end{array}$ | $\begin{array}{r} 1953 \\ .855 \end{array}$ | $\begin{array}{\|c\|} \hline .0 \\ 01 \end{array}$ | $1 \begin{gathered} 1 \\ . \\ .9 \\ 7 \\ 5 \\ .9 \end{gathered}$ |  | 420022181401635100000000000.000 | . 000 | b |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 47.4 | 838. | . 0 | 1 | 5 | $2.580 \mathrm{E}-021$ | . 000 | . |
|  | 06 | 603 | 03 |  | 5 |  |  |  |
| ke |  |  |  |  | . 6 |  |  |  |
| [Product=2] | $\begin{aligned} & 166 . \\ & 948 \end{aligned}$ | $\begin{array}{r} 389 . \\ 550 \end{array}$ | $84$ | 1 | 6 | $3.197 \mathrm{E}+072$ | $260$ | b |
|  | 948 | 550 | 84 |  | 8 |  | 260 |  |
| [Product=3] |  |  |  |  | . 7 |  |  |  |
|  | 106. | 296. | . 1 | 1 | 2 | $1.334 \mathrm{E}+046$ | $8.961 \mathrm{E}-$ | $1.986 \mathrm{E}+29$ |
|  | 207 | 255 | 29 |  | 0 |  | 207 | 8 |


| [Product=4] | 117. 933 | 277. 277 |  | 1. <br> 6 <br> 7 <br> 1 | $1.650 \mathrm{E}+051$ | $1.581 \mathrm{E}-$ 185 | 1.722E+28 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Product=5] | $\begin{gathered} 131 . \\ 096 \end{gathered}$ | $\begin{array}{r} 279 . \\ 589 \end{array}$ | 2 20 | $1 \begin{array}{r}.6 \\ 3 \\ 9\end{array}$ | 8.597E+056 | $8.875 \mathrm{E}-$ 182 | 8.329E+29 |
| [Product=6] | $\begin{gathered} 128 \\ 865 \end{gathered}$ | $\begin{array}{r} 292 . \\ 086 \end{array}$ | .1 95 | $1 \begin{array}{r}.6 \\ 5 \\ 9\end{array}$ | $9.235 \mathrm{E}+055$ | $2.193 E-$ 193 | $3.890 E+30$ 4 |
| [Product=7] | $\begin{gathered} 123 . \\ 333 \end{gathered}$ | $\begin{array}{r} 262 . \\ 873 \end{array}$ | $\begin{gathered} 2 \\ 20 \end{gathered}$ | $1 \begin{gathered}.6 \\ 3 \\ 9\end{gathered}$ | $3.655 \mathrm{E}+053$ | $6.387 \mathrm{E}-$ 171 | 2.092E+27 |
| [Price=0] | $\begin{array}{r} 56.9 \\ 80 \end{array}$ | $\begin{array}{r} 2080 \\ .298 \end{array}$ | $\begin{gathered} 0 \\ 01 \end{gathered}$ | $1 \begin{array}{r}.9 \\ 7 \\ 8\end{array}$ | $1.794 \mathrm{E}-025$ | . 000 | b |
| [Price=1] | $\begin{array}{r} 266 . \\ 727 \end{array}$ | $\begin{array}{r} 1062 \\ .226 \end{array}$ | $\begin{gathered} .0 \\ 63 \end{gathered}$ | $1 \begin{array}{r}.8 \\ 0 \\ 2\end{array}$ | $6.890 \mathrm{E}+115$ | . 000 | b |
| [Price=2] | $\begin{gathered} 119 . \\ 934 \end{gathered}$ | $\begin{array}{r} 576 . \\ 195 \end{array}$ | $\begin{gathered} .0 \\ 43 \end{gathered}$ | $1 \begin{array}{r}.8 \\ 3 \\ 5\end{array}$ | $1.221 \mathrm{E}+052$ | . 000 | b |
| [Price=3] | 3.75 6 | $\begin{gathered} 186 . \\ 922 \end{gathered}$ | $\begin{gathered} .0 \\ 00 \end{gathered}$ | $1 \begin{gathered}.9 \\ 8 \\ 4\end{gathered}$ | 42.798 | 3.334 E 158 | $5.494 E+16$ 0 |
| [Price $=4$ ] | $\begin{array}{r} 56.6 \\ 87 \end{array}$ | $\begin{gathered} 175 \\ 846 \end{gathered}$ | $\begin{gathered} .1 \\ 04 \end{gathered}$ | $1 \begin{array}{r}.7 \\ 4 \\ 7\end{array}$ | 41559690089948854000000 00.000 | $\begin{array}{r} 8.671 \mathrm{E}- \\ 126 \end{array}$ | $1.992 E+17$ 4 |
| [Price=5] | $\begin{array}{r} 47.4 \\ 56 \end{array}$ | $\begin{aligned} & 124 . \\ & 751 \end{aligned}$ | $\begin{gathered} .1 \\ 45 \end{gathered}$ | $1 \begin{array}{r}.7 \\ 0 \\ 4\end{array}$ | 407099589023062000000.0 00 | $\begin{array}{r} 2.640 \mathrm{E}- \\ 086 \end{array}$ | $6.278 \mathrm{E}+12$ 6 |
| [Price=6] | 52.7 05 | $\begin{array}{r} 89.1 \\ 78 \end{array}$ | $\begin{array}{r} .3 \\ 49 \end{array}$ | $1 \begin{array}{r}.5 \\ 5 \\ 5\end{array}$ | 77561062660263690000000 .000 | $9.569 E-$ 054 | $6.287 E+09$ 8 |
| [Price=7] [Place $=0]$ | $\left\|\begin{array}{r} 0^{c} \\ - \\ 222 . \\ 180 \end{array}\right\|$ | $\begin{array}{r} 1370 \\ .084 \end{array}$ | . 0 | 0 | 3.225E-097 | . 000 | . ${ }^{\text {b }}$ |







| [Product=3] | $\begin{array}{r} 113 . \\ 762 \end{array}$ | $\begin{array}{r} 296 . \\ 266 \end{array}$ |  <br> .1 <br> 47 | $1 \begin{aligned} & .7 \\ & 0 \\ & 0 \\ & 1\end{aligned}$ |  | $2.548 \mathrm{E}+049$ | $1.676 \mathrm{E}-$ 203 | 3.873E+30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Product=4] | $\begin{array}{r} 125 . \\ 146 \end{array}$ | $\begin{array}{r} 277 . \\ 282 \end{array}$ | $\begin{array}{r} .2 \\ 04 \end{array}$ | $1 \begin{array}{r}.6 \\ 5 \\ 2\end{array}$ |  | $2.239 \mathrm{E}+054$ | $2.123 \mathrm{E}-$ 182 | 2.362E+29 |
| [Product=5] | $\begin{gathered} 136 . \\ 771 \end{gathered}$ | $\begin{gathered} 279 . \\ 601 \end{gathered}$ | $\left\lvert\, \begin{gathered} .2 \\ 39 \end{gathered}\right.$ | $1 \begin{array}{r}.6 \\ 2 \\ 5\end{array}$ |  | $2.506 \mathrm{E}+059$ | $2.525 E-$ 179 | 2.486E+29 |
| [Product=6] | $\begin{gathered} 134 . \\ 220 \end{gathered}$ | $\begin{array}{r} 292 . \\ 096 \end{array}$ | $\begin{array}{r} .2 \\ 11 \end{array}$ | 1.6 <br> 4 <br> 6 |  | $1.955 \mathrm{E}+058$ | $4.559 E-$ 191 | $8.380 E+30$ 6 |
| [Product=7] | $\begin{gathered} 127 . \\ 889 \end{gathered}$ | $\begin{array}{r} 262 . \\ 881 \end{array}$ | $\begin{gathered} .2 \\ 37 \end{gathered}$ | $1 \begin{gathered}.6 \\ 2 \\ 7\end{gathered}$ |  | $3.480 \mathrm{E}+055$ | $5.985 \mathrm{E}-$ 169 | $2.024 E+27$ 9 |
| [Price=0] | $\begin{array}{r} - \\ 74.1 \\ 19 \end{array}$ | $\begin{array}{r} 2076 \\ .295 \end{array}$ | $\left(\begin{array}{r} .0 \\ 01 \end{array}\right.$ | 1.9 <br> 7 <br> 2 |  | $6.462 \mathrm{E}-033$ | . 000 | b |
| [Price=1] | $\begin{array}{r} 255 . \\ 796 \end{array}$ | $\begin{array}{r} 1062 \\ .223 \end{array}$ | $\begin{array}{r} .0 \\ 58 \end{array}$ | 1.8 <br> 1 <br> 0 |  | $1.233 \mathrm{E}+111$ | . 000 | b |
| [Price=2] | $\begin{array}{r} 113 . \\ 218 \end{array}$ | $\begin{array}{r} 576 . \\ 192 \end{array}$ | $\begin{gathered} .0 \\ 39 \end{gathered}$ | 1.8 <br> 4 <br> 4 |  | $1.479 \mathrm{E}+049$ | . 000 | b |
| [Price=3] | 410 | $\begin{gathered} 186 . \\ 922 \end{gathered}$ | $\begin{array}{\|c\|} \hline .0 \\ 00 \end{array}$ | 1.9 <br> 9 <br> 8 |  | 1.506 | $\begin{array}{r} 1.174 \mathrm{E}- \\ 159 \end{array}$ | $1.934 \mathrm{E}+15$ 9 |
| [Price $=4$ ] | $\begin{array}{r} 51.1 \\ 01 \end{array}$ | $\begin{array}{r} 175 . \\ 845 \end{array}$ | $\begin{array}{\|r\|} \hline .0 \\ 84 \end{array}$ | $1 . \begin{gathered}.7 \\ 7 \\ 1\end{gathered}$ |  | 15596762896007764000000 .000 | $\begin{array}{r} 3.264 \mathrm{E}- \\ 128 \end{array}$ | $7.452 \mathrm{E}+17$ 1 |
| [Price=5] | $\begin{array}{r} 45.6 \\ 99 \end{array}$ | $\begin{gathered} 124 . \\ 748 \end{gathered}$ | $\begin{aligned} & .1 \\ & 34 \end{aligned}$ | $1 . \begin{gathered}.7 \\ 1 \\ 4 \\ 4\end{gathered}$ |  | 70278338273512730000.00 | $4.581 \mathrm{E}-$ <br> 087 | $1.078 \mathrm{E}+12$ 6 |
| [Price=6] [Price=7] | $\left\|\begin{array}{r} 50.9 \\ 76 \\ 0^{c} \end{array}\right\|$ | $\begin{array}{r} 89.1 \\ 76 \end{array}$ | $\begin{array}{r} .3 \\ 27 \end{array}$ | 11 .5 <br> 6  <br> 0  <br> 8  |  | 13764591029903990000000 .000 | 1.708E- <br> 054 | $1.110 \mathrm{E}+09$ 8 |


|  |  |  |  |  |  |  | 7 0 0 0 0 0 0 |  | 7 0 0 0 0 $\omega$ $\omega$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\omega \stackrel{\text { v }}{\sim}$ | N ${ }_{\sim}^{0}$ ¢ | 을 |  |  |  |  | N ${ }_{\omega}^{\text {c }}$ | 式 | N $\begin{aligned} & \text { O } \\ & 0 \\ & 0\end{aligned}$ | $8 \stackrel{\rightharpoonup}{\sim}$ |  | べ |
| 克 $\stackrel{\rightharpoonup}{ \pm}$ | ${ }_{0}^{0}$ | N్N入へ | （1） | ㄱ |  | $\begin{array}{ll} \infty \\ \infty \\ \infty & \underset{O}{\circ} \\ \hline \end{array}$ | $\stackrel{N}{\sim}$ | $\stackrel{\rightharpoonup}{\omega} \underset{\sim}{\text { + }}$ | $\stackrel{0}{0}$ 合 | $\stackrel{\circ}{\sim}$ | N్ర్ర | 익 $\stackrel{\text { ® }}{ }$ |
| $\stackrel{\omega}{\omega}$ iv | $\stackrel{\omega}{\varphi}$－ | जे 0 | $\stackrel{\rightharpoonup}{\circ} 0$ | 아 0 | ． | G 0 | A 0 | ¢ 0 | $\stackrel{\rightharpoonup}{\mathrm{V}} 0$ | 오 0 | $\infty \bigcirc$ | N 0 |
| $\rightarrow$ | － | $\rightarrow$ | $\pm$ | $\rightarrow$ | $\bigcirc$ | $\pm$ | $\pm$ | $\pm$ | $\stackrel{+}{+}$ | $\pm$ | $\pm$ | $\rightarrow$ |
| $\infty$ へ ف் | $\bigcirc \rightarrow$－ | A $\quad$ v | －$\sim$ o | $\rightarrow$ O 0 | ． | $\bigcirc 0$－ | $\infty \quad \omega \quad \infty$ | $\bigcirc \bigcirc \infty$ | $\checkmark \bigcirc \infty$ | の ${ }^{\text {V }}$ | － 0 V | OT $\infty$ |
|  |  | $\begin{aligned} & \text { 두 } \\ & \text { N } \\ & \text { M } \\ & \text { O } \end{aligned}$ |  |  | ． | $\stackrel{\rightharpoonup}{\omega}$ <br> 0 <br> $\vdots$ <br> $\vdots$ <br> $\dot{\omega}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{v}} \\ & \text { ज } \\ & \text { M } \\ & \stackrel{\rightharpoonup}{+} \end{aligned}$ |  |  | $\vec{V}$ 0 0 0 0 $\omega$ |  |  |
| $\begin{array}{rr}  & \omega \\ & 0 \\ 0 \\ 0 & 0 \\ \hdashline & 0 \\ \hline \end{array}$ |  | ৪ | \% | ৪̀ | ． | ৪̀ | $\begin{array}{ll} & \stackrel{\rightharpoonup}{\circ} \\ \text { N N N } \\ \text { N }\end{array}$ | \% | © | 8 | 8 | 8 |
|  |  | ＇$\sigma$ | ${ }^{\circ}$ | б | ． |  |  | ＇$\sigma$ | ＇$\sigma$ | － | ＇$\sigma$ | ${ }^{\circ}$ |


|  |  |  |  | $\begin{aligned} & 70 \\ & 00 \\ & \frac{1}{\hat{0}} \\ & 0 \\ & 0 . \\ & \text { 0. } \\ & \stackrel{0}{0} \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 70 \\ & 00 \\ & \frac{1}{\hat{1}} \\ & 0 \\ & 0 . \\ & 0 . \\ & 0 \\ & 0 . \end{aligned}$ |  | 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 | 0 0 0 0 0 0 0 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { A } \\ & \text { © } \\ & \infty \end{aligned}$ |  |  | $\bigcirc$ | フ ${ }_{\text {N }}^{\text {N }}$ | A $\begin{gathered}\text { ¢ } \\ \text { cror }\end{gathered}$ | ＋ $\begin{array}{r}\text { ¢ } \\ +\end{array}$ | $\cdots \stackrel{\rightharpoonup}{ \pm}$ | V ${ }^{\text {¢ }} \stackrel{+}{+}$ | N | O $\stackrel{N}{+}$ | 0 |  | ¢ ${ }^{\sim}$ |
|  | － | $\begin{array}{ll}\infty & \sim \\ \pm & \\ \sim\end{array}$ | ． | ¢ | $\begin{array}{ll}\infty & \stackrel{\rightharpoonup}{\text { ¢ }} \\ \underline{+}\end{array}$ | ® $\begin{aligned} & \text { N } \\ & \text { O }\end{aligned}$ | $\stackrel{\sim}{\sim}$ | $\stackrel{\rightharpoonup}{\circ}$－ | $\begin{array}{ll}\text { ® } \\ \text { ¢ } & \text { ¢ }\end{array}$ | － | ． | O | － |
| N O | 우 | No | ． | 9\％ | $\bigcirc 0$ | ก 0 | 우 | $\pm$ د | N 0 | ． | ． | N | $\stackrel{\rightharpoonup}{+}$－ |
| $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ | $\pm$ | $\cdots$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\cdots$ | O | $\rightarrow$ | $\rightarrow$ |
| $\rightarrow \quad \infty$ | $\omega \quad$ の 0 | の日 ம | ． | $\checkmark \bigcirc \infty$ | － | － 9 ம | $\bigcirc$ の 0 | $\checkmark \rightarrow$－ | $\rightarrow \infty \quad \infty$ | ． |  | の $\rightarrow$ ¢ | $\cdots 0$ o |
|  |  | $\omega$ <br> 0 <br>  <br>  <br> 1 <br> $\vdots$ <br> $\omega$ | ． | $\begin{aligned} & \stackrel{\rightharpoonup}{+} \\ & \stackrel{\rightharpoonup}{+} \\ & \text { 荌 } \\ & \stackrel{\rightharpoonup}{n} \end{aligned}$ |  | 0 <br> $N$ <br> 0 <br> 0 <br> 0 | D D 0 0 + 0 0 0 |  | $\begin{aligned} & \stackrel{\rightharpoonup}{+} \\ & \underset{\sim}{+} \\ & m \\ & + \\ & + \\ & +\infty \end{aligned}$ |  | ． | $\infty$ <br> $\stackrel{\infty}{\omega}$ <br> $\omega$ <br> $\vdots$ <br> 0 <br> - |  |
|  | 응 | 응 | ． |  |  |  |  | 응 | O |  | ． |  |  |
|  | $\cdot \sigma$ | ${ }^{\circ}$ | ． |  |  |  |  | ${ }^{\circ} \sigma$ | ${ }^{\circ}$ |  | ． |  |  |



| [Personal_facto $\mathrm{rs}=0]$ | $\begin{aligned} & 144 . \\ & 412 \end{aligned}$ | $\begin{array}{r} 3308 \\ .043 \end{array}$ | . 0 | 1 | .9 6 5 | 5.217E+062 | . 000 | b |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Personal_facto $\mathrm{rs}=1]$ | $\begin{array}{r} 61.3 \\ 86 \end{array}$ | 1177 .876 | .0 03 | 1 | .9 5 8 | $2.190 \mathrm{E}-027$ | . 000 | b |
| [Personal_facto rs=2] | $14.9$ $25$ | 598. 864 | .0 01 | 1 | .9 8 0 | 3.297E-007 | . 000 | b |
| [Personal_facto rs=3] | $\begin{gathered} 102 . \\ 068 \end{gathered}$ | 236. 112 | $\begin{aligned} & .1 \\ & 87 \end{aligned}$ | 1 | .6 6 6 | 4.702E-045 | $4.934 \mathrm{E}-$ 246 | $4.482 \mathrm{E}+15$ 6 |
| [Personal_facto rs=4] | $\begin{array}{r} - \\ 2.70 \\ 0 \end{array}$ | $\begin{gathered} 211 . \\ 083 \end{gathered}$ | . 0 | 1 | .9 9 0 | . 067 | $\begin{array}{r} 1.424 \mathrm{E}- \\ 181 \end{array}$ | $3.174 \mathrm{E}+17$ 8 |
| [Personal_facto rs=5] | $37.4$ $12$ | $\begin{aligned} & 126 . \\ & 955 \end{aligned}$ | .0 87 | 1 | .7 6 8 | 5.653E-017 | $4.873 \mathrm{E}-$ 125 | 6.557E+09 |
| [Personal_facto rs=6] | - 5.83 1 | $\begin{array}{r} 53.5 \\ 91 \end{array}$ | $\begin{gathered} .0 \\ 12 \end{gathered}$ | 1 | .9 1 3 | . 003 | $7.090 \mathrm{E}-$ 049 | $1.216 \mathrm{E}+04$ 3 |
| [Personal_facto rs=7] | $0^{\text {c }}$ |  |  | 0 | . | . |  |  |
| [Psychological_ factors=0] | $\begin{array}{r} 13.1 \\ 75 \end{array}$ | $\begin{array}{r} 1744 \\ .358 \end{array}$ | . 0 | 1 | .9 9 4 | 526936.404 | . 000 | b |
| [Psychological_ factors=1] | $\begin{array}{r} 15.0 \\ 99 \end{array}$ | $\begin{array}{r} 1245 \\ .476 \end{array}$ | $\begin{gathered} .0 \\ 00 \end{gathered}$ | 1 | .9 9 0 | 3609690.696 | . 000 | b |
| [Psychological_ factors=2] | $99.0$ $04$ | $\begin{array}{r} 311 . \\ 125 \end{array}$ | $\begin{array}{\|l\|l} .1 \\ 01 \end{array}$ | 1 | .7 5 0 | 1.007E-043 | . 000 | $6.811 \mathrm{E}+22$ 1 |
| [Psychological_ factors=3] | $\begin{aligned} & 107 . \\ & 980 \end{aligned}$ | $\begin{array}{r} 351 . \\ 244 \end{array}$ | $\begin{array}{r} .0 \\ 95 \end{array}$ | 1 | .7 5 9 | $7.855 \mathrm{E}+046$ | $\begin{array}{r} 8.231 \mathrm{E}- \\ 253 \end{array}$ | b |
| [Psychological_ factors=4] | $\begin{array}{r} 62.7 \\ 26 \end{array}$ | $\begin{gathered} 180 . \\ 317 \end{gathered}$ | .1 21 | 1 | . 7 | 17440935836012210000000 00000.000 | $5.700 \mathrm{E}-$ $127$ | 5.337E+18 |


a. The reference category is: Est.
b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
c. This parameter is set to zero because it is redundant.

## Nominal Regression

Case Processing Summary

|  |  | N | Marginal <br> Percentage |
| :---: | :---: | :---: | :---: |
| Brandpreference | Coke | 223 | 55.8\% |
|  | Pepsi | 125 | 31.2\% |
|  | Est | 52 | 13.0\% |
|  | Strongly Disagree | 3 | 0.8\% |
|  | Disagree | 22 | 5.5\% |
| Brandname | Neutral | 74 | 18.5\% |
|  | Agree | 176 | 44.0\% |
|  | Strongly Agree | 125 | 31.2\% |
|  | Disagree | 9 | 2.2\% |
| Productquality | Neutral | 49 | 12.2\% |
|  | Agree | 139 | 34.8\% |
|  | Strongly Agree | 203 | 50.8\% |
|  | Strongly Disagree | 2 | 0.5\% |
|  | Disagree | 26 | 6.5\% |
| Productvariety | Neutral | 86 | 21.5\% |
|  | Agree | 171 | 42.8\% |
|  | Strongly Agree | 115 | 28.8\% |
|  | Disagree | 17 | 4.2\% |
| Availabiltyofconvenientsize | Neutral | 62 | 15.5\% |
|  | Agree | 187 | 46.8\% |
| competitiveprice | Strongly Agree | 134 | 33.5\% |
|  | Strongly Disagree | 4 | 1.0\% |
|  | Disagree | 22 | 5.5\% |
|  | Neutral | 93 | 23.2\% |
|  | Agree | 190 | 47.5\% |
| cheaperthanitscompetitors | Strongly Agree | 91 | 22.8\% |
|  | Strongly Disagree | 12 | 3.0\% |
|  | Disagree | 37 | 9.2\% |
|  | Neutral | 100 | 25.0\% |
|  | Agree | 153 | 38.2\% |
| goodvalue | Strongly Agree | 98 | 24.5\% |
|  | Strongly Disagree | 8 | 2.0\% |
|  | Disagree | 22 | 5.5\% |
|  | Neutral | 91 | 22.8\% |
|  | Agree | 162 | 40.5\% |
|  | Strongly Agree | 117 | 29.2\% |
| Accessibility | Strongly Disagree | 1 | 0.2\% |



|  | Neutral | 74 | $18.5 \%$ |
| :--- | :--- | ---: | ---: |
|  | Agree | $39.8 \%$ |  |
|  | Strongly Agree | 159 | $35.0 \%$ |
|  | Strongly Disagree | 140 | $2.2 \%$ |
|  | Disagree | 5 | $5.8 \%$ |
|  | Appealinglogo | 23 | $24.5 \%$ |
|  | Agree | 98 | $46.5 \%$ |
|  | Strongly Agree | $21.0 \%$ |  |
|  | Strongly Disagree | 34 | $3.8 \%$ |
|  | Disagree | 15 | $6.0 \%$ |
|  | Neutral | 24 | $24.5 \%$ |
|  | Agree | 98 | $40.0 \%$ |
|  | Strongly Agree | 160 | $25.8 \%$ |
|  |  | 103 | $100.0 \%$ |
|  |  | 400 |  |
| Creativeslogans |  | 0 |  |
|  |  | 400 |  |
| Valid |  | $194^{\mathrm{a}}$ |  |

a. The dependent variable has only one value observed in 183 (94.3\%) subpopulations.

Model Fitting Information


Pseudo R-Square

| Cox and Snell | .701 |
| :--- | :--- |
| Nagelkerke | .789 |
| McFadden | .550 |

## Likelihood Ratio Tests

| Effect | Model Fitting | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $-2 \log$ <br> Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Pr_Brandname | $405.747^{\text {a }}$ | 44.378 | 6 | . 000 |
| Pr_Productquality | $395.75{ }^{\text {b }}$ | 34.383 | 6 | . 000 |
| Pr_Productvariety | $374.282^{\text {a }}$ | 12.913 | 8 | . 115 |
| Pr_Availabiltyofconvenientsi ze | $404.406^{\text {a }}$ | 43.037 | 6 | . 000 |
| Pri_competitiveprice | $406.650^{\text {a }}$ | 45.281 | 6 | . 000 |
| Pri_cheaperthanitscompetit ors | 415.999 | 54.630 | 8 | . 000 |
| Pri_goodvalue | $423.818^{\text {a }}$ | 62.449 | 8 | . 000 |
| PI_Accessibility | $377.712^{\text {a }}$ | 16.343 | 6 | . 012 |
| PI_Merchandisingdisplay | $412.578^{\text {a }}$ | 51.209 | 8 | . 000 |
| Pl_Convenienthours | 409.528 | 48.159 | 6 | . 000 |
| Pro_Discount | $1227.017^{\text {b }}$ | 865.648 | 6 | . 000 |
| Pro_cashcoupons | $410.241^{\text {a }}$ | 48.872 | 8 | . 000 |
| Pro_attractiveadvertisemne nt | $416.215^{\text {a }}$ | 54.846 | 8 | . 000 |
| Pro_brandendorsement | 402.946 | 41.577 | 8 | . 000 |
| Pa_Trendypackaging | $337.839^{\text {a }}$ |  | 6 |  |
| Pa_Varietyofsize | 424.107 | 62.738 | 8 | . 000 |
| Pa_Appealinglogo | $429.782^{\text {a }}$ | 68.413 | 8 | . 000 |
| Pa_Creativeslogans | $426.833^{\text {a }}$ | 65.465 | 8 | . 000 |

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0. a. Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.
b. The log-likelihood value cannot be further increased after maximum number of step-halving.

Parameter Estimates
$\left.\begin{array}{|l|c|c|c|c|c|c|c|}\hline \text { Brandpreference }^{\mathrm{a}} & \text { B } & \begin{array}{c}\text { Std. } \\ \text { Error }\end{array} & \text { Wald } & \text { d } & \text { Si } \\ \text { f } \\ \text { g. }\end{array} \quad \begin{array}{c}\text { Exp(B) } \\ \text { Confidence } \\ \text { Interval for } \\ \operatorname{Exp}(B)\end{array}\right]$

|  |  |  |  |  |  |  | Lower Bound | Upper <br> Bound |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Pr_Brandname=1] | $\begin{array}{r} 690 \\ 442 \end{array}$ | $\begin{gathered} 5243 \\ 2.532 \end{gathered}$ | . 000 | 1 | .9 89 | 1.396E-300 | . 000 | b |
| [Pr_Brandname=2] | $\begin{array}{r} 165 . \\ 222 \end{array}$ | $\begin{array}{r} 2320 . \\ 243 \end{array}$ | . 005 | 1 | $\begin{array}{r} .9 \\ 43 \end{array}$ | 5.689E+071 | . 000 | b |
| [Pr_Brandname=3] | $\begin{array}{r} 88.9 \\ 51 \end{array}$ | $\begin{array}{r} 1202 \\ 5.552 \end{array}$ | . 000 | 1 | .9 94 | $4.275 \mathrm{E}+038$ | . 000 | b |
| [Pr_Brandname=4] | $\begin{array}{r} 308 . \\ 103 \end{array}$ | $\begin{array}{r} 1056 \\ 0.310 \end{array}$ | . 001 | 1 | $\begin{array}{r} .9 \\ 77 \end{array}$ | $6.418 \mathrm{E}+133$ | . 000 | b |
| [Pr_Brandname=5] | $\begin{array}{r} 365 . \\ 078 \end{array}$ | $\begin{array}{r} 1297 \\ 2.048 \end{array}$ | . 001 | 1 | $\begin{array}{r} .9 \\ 78 \end{array}$ | $3.558 \mathrm{E}+158$ | . 000 | b |
| [Pr_Productquality= 2] | $\begin{array}{r} 1941 \\ .428 \end{array}$ | $\begin{array}{r} 1499 \\ 3.215 \end{array}$ | . 017 | 1 | $\begin{gathered} .8 \\ 97 \end{gathered}$ | . 000 | . 000 | b |
| ```[Pr_Productquality= 3]``` | 59.4 $68$ | $\begin{array}{r} 5674 . \\ 803 \end{array}$ | . 000 | 1 | .9 92 | 1.491E-026 | . 000 | b |
| $\begin{aligned} & \text { Co [Pr_Productquality= } \\ & \text { ke } 4] \end{aligned}$ | $\begin{array}{r} 20.1 \\ 76 \end{array}$ | $\begin{array}{r} 5408 . \\ 743 \end{array}$ | . 000 | 1 | .9 97 | 578755358.050 | . 000 | b |
| [Pr_Productquality= 5] | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Pr_Productvariety= 1] | 19.0 $60$ | $\begin{array}{r} 4816 \\ 5.629 \end{array}$ | . 000 | 1 | 1. 00 0 | 5.275E-009 | . 000 | b |
| [Pr_Productvariety= <br> 2] | $\begin{gathered} 187 . \\ 895 \end{gathered}$ | $\begin{array}{r} 1665 \\ 2.043 \end{array}$ | . 000 | 1 | .9 91 | 2.502E-082 | . 000 | b |
| [Pr_Productvariety= <br> 3] | $\begin{array}{r} 38.2 \\ 37 \end{array}$ | $\begin{array}{r} 1126 . \\ 202 \end{array}$ | . 001 | 1 | .9 73 | 40374918843685728.000 | . 000 | . ${ }^{\text {b }}$ |
| $\begin{aligned} & \text { [Pr_Productvariety= } \\ & \text { 4] } \end{aligned}$ | $\begin{array}{r} - \\ 40.4 \\ 03 \end{array}$ | $\begin{array}{r} 860.1 \\ 52 \end{array}$ | . 002 | 1 | .9 63 | 2.839E-018 | . 000 | b |
| $\begin{aligned} & \text { [Pr_Productvariety= } \\ & 5] \end{aligned}$ | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Pr_Availabiltyofcon venientsize=2] | $\begin{array}{r} 578 . \\ 439 \end{array}$ | $\begin{array}{r} 5985 . \\ 339 \end{array}$ | . 009 | 1 | .9 23 | $1.632 \mathrm{E}+251$ | . 000 | b |




|  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { To } \\ & \frac{0}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { To } \\ & \frac{0}{0} \\ & \frac{0}{6} \\ & 0 \\ & \frac{0}{\#} \\ & \# \\ & \pm \end{aligned}$ | 7 0 0 0 0 0 0 0 0 $\vdots$ $\omega$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\sim}{\sim}$ | 岗 |  | 0 | $\bigcirc \stackrel{\text { v }}{\text { Ј }}$ ， | $\pm \stackrel{\text { ¢ }}{\stackrel{\rightharpoonup}{\text { ¢ }}}$ | $\stackrel{\rightharpoonup}{\omega}{ }_{\omega}^{\omega}$ | $\begin{array}{ll}\infty \\ 0 \\ 0 & N \\ \cdots\end{array}$ | 0 | N ${ }_{\text {N }}^{\sim}$ | N | $8 \stackrel{N}{N}$ ， | ONㅓㄱ | 0 | $\stackrel{\rightharpoonup}{\omega} \stackrel{\text { 土 }}{ \pm}$ |  |
| $\begin{array}{ll} \stackrel{+}{\stackrel{\rightharpoonup}{+}} \\ \stackrel{\rightharpoonup}{\omega} & \stackrel{\rightharpoonup}{0} \end{array}$ | $\begin{array}{ll}  & \stackrel{0}{\circ} \\ 0 \\ \hline 8 & \circ \\ \hline \end{array}$ | $\begin{array}{ll}  \\ N_{v}^{\infty} \\ \underset{\sim}{\infty} \\ \hline \end{array}$ | ． | ¢\％ | $\begin{array}{ll}  & N \\ \stackrel{N}{\square} \\ \hline \end{array}$ | $\begin{array}{ll} \hline \infty \\ \stackrel{\rightharpoonup}{0} \\ \underset{\sim}{\circ} & \stackrel{\rightharpoonup}{\perp} \end{array}$ |  |  | $\begin{array}{ll}  & { }_{0}^{0} \\ \sim \\ \AA \end{array}$ | $\begin{aligned} & \mathbf{B}_{0}^{\infty} \\ & \pm \end{aligned}$ | $\begin{array}{ll} \infty \\ \stackrel{\rightharpoonup}{\mathrm{N}} & \stackrel{\rightharpoonup}{\mathrm{G}} \end{array}$ | $\begin{array}{ll} \stackrel{\rightharpoonup}{\prime} \\ \stackrel{y}{\circ} & \stackrel{0}{\circ} \end{array}$ |  | ¢\％${ }_{\circ}^{\circ}$ | $\stackrel{\omega}{\square}$ N |
| 8 | $\bigcirc$ | へ్ర్ర | ． | \％ | $8$ | O | $8$ | ． | $\bigcirc$ | $8$ | $8$ | O | ． | ৪ | 8 |
| $\xrightarrow{-}$ | $\rightarrow$ | $\rightarrow$ | － | $\cdots$ | $\rightarrow$ | $\xrightarrow{-}$ | $\rightarrow$ | － | $\rightarrow$ | － | $\rightarrow$ | － | 0 | $\xrightarrow{-}$ | $\rightarrow$ |
| 8 \％ | ¢ै 6 | $\stackrel{\infty}{\infty}$ | ． | $\stackrel{\infty}{\infty}$ | $\stackrel{\infty}{0}$ | む） | $\stackrel{\sim}{0}$ |  | ¢ \％ | $\stackrel{\square}{6}$－ | ¢ ம | $\infty$ | ． | $\stackrel{6}{6}$ | $\stackrel{\infty}{0}$ |
|  | $\begin{aligned} & \stackrel{\omega}{\stackrel{\rightharpoonup}{\circ}} \\ & \stackrel{\rightharpoonup}{\square} \\ & \stackrel{\rightharpoonup}{\sigma} \end{aligned}$ | \％ | ． |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\bullet} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\rightharpoonup}{+} \\ & \stackrel{\rightharpoonup}{\infty} \end{aligned}$ |  |  |  |  |  | $\stackrel{\rightharpoonup}{0}$ $\sim$ $\infty$ $\infty$ + $N$ $\sim$ $\infty$ |  | $\begin{aligned} & \omega \\ & \dot{\omega} \\ & \text { © } \\ & 0 \\ & \stackrel{1}{0} \end{aligned}$ | $\begin{aligned} & \stackrel{N}{\omega} \\ & \stackrel{1}{\omega} \\ & \stackrel{\rightharpoonup}{3} \end{aligned}$ |
| 8 | 8 | 8 | ． | 8 | io | io | io | ． | 8 | 8 | 8 | 8 | ． | 8 | 8 |
| ${ }^{\circ}$ | －$\sigma$ | ＇$\sigma$ | ． | ${ }^{\circ}$ | ＇$\sigma$ | ${ }^{\circ}$ | $\cdot{ }^{\circ}$ | ． | ＇$\sigma$ | ${ }^{\circ}$ | ${ }^{\circ}$ | ${ }^{\circ}$ | ． | ＇$\sigma$ | $\cdot \sigma$ |




| $\stackrel{\rightharpoonup}{\omega}$ 山 W $\dot{\Delta}$ $\underset{\sim}{\infty}$ |  | . | $\stackrel{\rightharpoonup}{J}$ $\stackrel{0}{0}$ $\stackrel{0}{0}$ 0 0 0 0 0 |  | 8 |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\omega} \\ & \underset{\sim}{\omega} \\ & \stackrel{1}{\omega} \\ & \stackrel{\omega}{\omega} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & \stackrel{0}{0} \\ & \stackrel{1}{+} \\ & + \\ & \stackrel{\omega}{\infty} \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\dot{0}} \\ & \underset{1}{+} \\ & \stackrel{+}{\circ} \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\theta}{0} \\ & \stackrel{0}{0} \\ & \stackrel{\rightharpoonup}{0} \\ & \stackrel{1}{2} \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{0}{\mathrm{H}} \\ & \stackrel{\rightharpoonup}{n} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ | $\begin{aligned} & \stackrel{+}{\circ} \\ & \dot{\infty} \\ & \stackrel{+}{+} \\ & \stackrel{+}{\omega} \end{aligned}$ | $\begin{aligned} & \infty \\ & \stackrel{\sim}{\otimes} \\ & \underset{\sim}{+} \\ & \underset{\sim}{ \pm} \\ & \underset{\sim}{0} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $8$ | ৪i | . | O | ৪ | 8 | 8் | 8 | 8் | O | 8் |  | $\begin{array}{ll} \square \\ \stackrel{\rightharpoonup}{\circ} \\ \stackrel{N}{N} \\ 0 \end{array}$ | 8 | $\begin{array}{ll}\stackrel{m}{ \pm} & \stackrel{\rightharpoonup}{\omega} \\ \stackrel{\rightharpoonup}{\omega} & \text { ప. } \\ 0\end{array}$ | 8요 |
| $\sigma$ | \% |  | - | \% | - $\sigma$ | б | $\bigcirc$ | $\sigma$ | $\sigma$ | \% |  | $\begin{aligned} & \frac{1}{8} \stackrel{\rightharpoonup}{8} \\ & \hline 8 \end{aligned}$ | \% | $\begin{array}{ll} \hline \boldsymbol{m} & \omega \\ \stackrel{\omega}{\omega} & \underset{\sim}{\circ} \\ \underset{\sim}{\circ} \end{array}$ | \% |


| [Pr_Productvariety= | 38.5 | 1126. |
| :---: | :---: | :---: |
| 3] | 69 | 202 |
| [Pr_Productvariety= |  | 860.1 |
| 4] |  | 52 |
| [Pr_Productvariety= 5] | $0^{\text {c }}$ |  |
| [Pr_Availabiltyofcon | 580. | 5985. |
| venientsize=2] | 172 | 339 |
| [Pr_Availabiltyofcon | 91.8 | 1600. |
| venientsize=3] | 63 | 918 |
| [Pr_Availabiltyofcon | 104. | 4752. |
| venientsize=4] | 183 | 608 |
| [Pr_Availabiltyofcon venientsize=5] | $0^{\text {c }}$ |  |
| [Pri_competitivepric |  | 1691 |
| $\mathrm{e}=1$ ] |  | 1.049 |
| [Pri_competitivepric | 243. | 8134. |
| $\mathrm{e}=2$ ] | 533 | 448 |
| [Pri_competitivepric | 213. | 7235. |
| $\mathrm{e}=3$ ] | 041 | 315 |
| [Pri_competitivepric | 73.7 | 2411. |
| $\mathrm{e}=4]$ | 92 | 763 |
| [Pri_competitivepric $e=5]$ | $0^{\text {c }}$ |  |
| [Pri_cheaperthanits | 21.1 | 2934. |
| competitors=1] | 21.1 95 | 696 |
| [Pri_cheaperthanits |  | 1039 |
| competitors=2] | 647 | 8.760 |
| [Pri_cheaperthanits | 51.7 | 5699. |
| competitors=3] | 76 | 077 |
| [Pri_cheaperthanits | 17.3 | 8110. |
| competitors=4] | 34 34 | 843 |
| [Pri_cheaperthanits competitors=5] | $0^{\text {c }}$ |  |



|  |  |  |  |  |  |  |  |  | $\left[\varepsilon=\kappa\langle!!!!\|!s s ə \supset ว \forall^{-} \mid \mathrm{d}\right]$ | ［PI＿Accessibility＝2］ | $\left[\downarrow=\right.$ K $\left.!!!\|!\| \leq s s ə \partial \circ \forall^{-} \mid d\right]$ | $\begin{aligned} & \text { To } \\ & \underline{1} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 00 \end{aligned}$ |  | 7 0 0 0 0 0 0 0 0 0 0 0 | 7 0 0 0 0 0 0 0 0 0 0 0 |  |
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|  | 0 | 0 | $\stackrel{\sim}{\circ}$ ¢ | N | O O | $\stackrel{\stackrel{\rightharpoonup}{\oplus}}{\stackrel{\rightharpoonup}{\bullet}}$ | $0$ |  |  | No | $\underset{\text { 山/ }}{\stackrel{\rightharpoonup}{\lambda}}$ | $0_{0}$ | $\stackrel{\rightharpoonup}{\circ}$ | O） | $\underset{\odot}{\circ} \stackrel{\rightharpoonup}{\oplus}$ | $$ |
| $\begin{array}{ll} \stackrel{\rightharpoonup}{\omega} \\ \underset{V}{*} & \stackrel{N}{ \pm} \end{array}$ | ． | ． | \％$\stackrel{\sim}{0}$ | ¢ ${ }_{\sim}^{\text {N }}$＋ | $\begin{array}{ll} \infty \\ \stackrel{\infty}{8} & \stackrel{\infty}{0} \end{array}$ | $\begin{array}{ll} 1 \\ \hline 8 \\ \text { N } \\ \hline \end{array}$ |  | $\stackrel{\rightharpoonup}{\omega} \stackrel{\vec{N}}{\stackrel{\rightharpoonup}{N}}$ | $\begin{array}{ll}  & \stackrel{\omega}{\omega} \\ \underset{y}{\mathrm{j}} \\ \hline \end{array}$ |  | $\begin{array}{ll} \stackrel{\rightharpoonup}{\mathrm{O}} \\ \stackrel{\rightharpoonup}{ \pm} \\ \hline \end{array}$ |  | 号 宁 | $\cdots$ | $\begin{array}{ll} \omega \\ \stackrel{\rightharpoonup}{\omega} \\ \stackrel{\circ}{\omega} \end{array}$ | $\stackrel{\sim}{\infty} \underset{\sim}{\sim}$ |
| 8 | ． | ． | $\stackrel{\bigcirc}{-}$ | $\stackrel{\bigcirc}{-}$ | 8 | 8 |  | 9 | O | 8 | O |  | ి్రి | O | $\stackrel{\circ}{\circ}$ | O |
| $\pm$ | － | O | － | $\pm$ | － | $\rightarrow$ | － | $\rightarrow$ | － | $\pm$ | － | O | $\pm$ | $\pm$ | $\pm$ | － |
| $\stackrel{\square}{\bullet}$ | ． | ． | $\stackrel{\rightharpoonup}{\nu}$－ | $\stackrel{\rightharpoonup}{v}$ o | $\stackrel{\odot}{\bullet}$ | v 6 | ． | vै 0 | $\stackrel{\circ}{N}$ | 8 ¢ | $\stackrel{¢}{\sim}$ |  | $\bigcirc{ }_{\square} \times$ | No 0 | N 0 | $\stackrel{\circ}{\infty}$ \％ |
| $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \stackrel{\text { N}}{n} \\ & \stackrel{\rightharpoonup}{N} \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\infty}{\infty} \\ & \stackrel{\rightharpoonup}{\omega} \\ & \stackrel{\rightharpoonup}{N} \\ & \infty \\ & \hline \end{aligned}$ | $\begin{aligned} & \circ \\ & \stackrel{\rightharpoonup}{\stackrel{ }{\circ}} \\ & \stackrel{\rightharpoonup}{6} \\ & \stackrel{\circ}{\circ} \end{aligned}$ |  |  |  |  | $\begin{aligned} & \omega \\ & \stackrel{0}{0} \\ & \stackrel{1}{0} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\omega} \\ & \underset{\sim}{n} \\ & \underset{\sim}{+} \\ & \stackrel{\rightharpoonup}{*} \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \text { ob } \\ & \text { M } \\ & + \\ & \text { o } \\ & \hline \end{aligned}$ | ． |  |  |  | $\begin{aligned} & 0 \\ & 0 . \\ & \stackrel{0}{0} \\ & \stackrel{1}{\omega} \\ & \stackrel{\rightharpoonup}{2} \end{aligned}$ |
| ৪i | ． | ． | © | ৪ | ৪i | ৪ |  | ৪i | ৪i | ৪ | io |  | © | © | ৪i | 8 |
| －$\sigma$ | ． | ． | － | \％ | $\sigma$ | ${ }^{\circ}$ | ． | ${ }^{\circ}$ | ${ }^{\circ}$ | ${ }^{\circ}$ | \％ | ． | ${ }^{\circ}$ | \％ | ＇$\sigma$ | \％ |


|  |  |  |  |  | $\begin{array}{r}10 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \hline\end{array}$ |  |  |  |  | $\begin{aligned} & \text { To } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { To } \\ & \frac{0}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \frac{1}{0} \\ & \pm \end{aligned}$ | $\begin{aligned} & \text { To } \\ & \frac{0}{\circ} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & \vdots \\ & \omega \end{aligned}$ | [z=łunoss!a-odd] |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | \& Nָ, | $\stackrel{\omega}{\omega}$ | $\begin{array}{ll} 0 & \omega \\ \infty & \stackrel{\rightharpoonup}{0} \end{array}$ | $\omega_{\infty}$ | 0 | $\frac{0}{N} \stackrel{N}{0}$ | $\Leftrightarrow \stackrel{\varnothing}{\stackrel{+}{\omega}}$ | $\pm$ | $$ | 0 | $\stackrel{\rightharpoonup}{\omega} \stackrel{\rightharpoonup}{\text { in }}$ | $\begin{array}{ll} N & \vec{\omega} \\ \hline 0 & \underset{\sim}{0} \end{array}$ | $\stackrel{\pi}{\omega} \stackrel{\infty}{\infty}$ | 0 | 0 | ¢ ¢ | 8 ${ }_{\text {® }}^{\text {¢ }}$ |
| . | ¢ٌ | N | $\begin{array}{ll} \hline \infty \\ \hat{N} & \stackrel{\rightharpoonup}{\square} \\ \underset{\sim}{A} & \end{array}$ | $\begin{aligned} & \stackrel{0}{\omega} \\ & \underset{y}{\circ} \\ & \underset{\sim}{\circ} \end{aligned}$ |  | ज | ( ${ }^{\circ}$ | $\begin{aligned} & \infty \\ & \stackrel{\rightharpoonup}{\mathrm{N}} \underset{\sim}{\omega} \end{aligned}$ | $\begin{array}{ll} \text { Ň } \\ \text { No } \\ \hline \end{array}$ |  | ¢9\% ${ }_{\circ}^{\circ}$ | $\underset{\sim}{\omega}$ | $\begin{array}{ll} \stackrel{\rightharpoonup}{\omega} \\ \stackrel{\rightharpoonup}{v} & 0 \\ \hline \end{array}$ | . | . | $\begin{array}{ll} \stackrel{\circ}{\infty} \\ \infty \\ \infty \\ \infty \end{array}$ | $\omega$  <br> $\stackrel{\omega}{\omega}$ $\stackrel{\rightharpoonup}{ \pm}$ <br> $\stackrel{\rightharpoonup}{\sigma}$  <br>   |
| . | - | 8 | 8 | O |  | $\bigcirc$ | O | 8 | 8 | . | O | 8 | 8 | . | . | 8 | 8 |
| 0 | - | , | , | - | 0 | $\cdots$ | - | $\rightarrow$ | $\xrightarrow{ }$ | O | $\rightarrow$ | $\rightarrow$ | $\cdots$ | 0 | O | - | $\pm$ |
| . | $\stackrel{\infty}{\infty}$ | ¢ ¢ | べ | $\stackrel{\infty}{\circ}$ |  | G $¢$ | $\stackrel{\varrho}{6}$ | 8 ¢ | $\infty$ |  | $\mathscr{\omega}$ ¢ | $\stackrel{\sim}{0}$ | $\searrow$ V | . | . | $\infty$ ¢ | $\stackrel{0}{1}$ - |
| . |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{N} \\ & \text { N} \\ & \text { M } \\ & \stackrel{\rightharpoonup}{+} \\ & \stackrel{\rightharpoonup}{\infty} \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\nabla} \\ & \stackrel{\rightharpoonup}{\circ} \\ & \stackrel{\rightharpoonup}{+} \\ & \stackrel{\rightharpoonup}{\sim} \end{aligned}$ |  | $\begin{aligned} & \omega \\ & \stackrel{\rightharpoonup}{\omega} \\ & \stackrel{1}{\omega} \\ & \stackrel{\rightharpoonup}{\omega} \\ & \hline \end{aligned}$ |  |  | $\begin{aligned} & \omega \\ & \stackrel{\rightharpoonup}{N} \\ & \underset{N}{0} \\ & \stackrel{N}{-} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { V } \\ & \text { N్ } \\ & \text { M } \\ & \pm \\ & \stackrel{\rightharpoonup}{\top} \end{aligned}$ | . | . | $\begin{aligned} & \omega \\ & \text { é } \\ & \text { ü } \\ & \text { + } \\ & \underset{\sim}{c} \end{aligned}$ |  |
| . | ৪i | ৪i | io | io |  | io | ৪ | ৪i | ৪ |  | ৪i | ì | ৪ | . | . | $8$ | \% |
| . | $\sigma$ | \% | $\sigma$ | \% | . | ' $\sigma$ | ' $\sigma$ | \% | ${ }^{\circ}$ | . | ${ }^{\circ}$ | ' $\sigma$ | ${ }^{\circ}$ | . | . | $\sigma$ | $\sigma$ |


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| $$ | $0_{0}$ | $\begin{array}{ll} N \\ \text { NO } \\ \text { O } & \text { O } \end{array}$ | $\begin{array}{ll} 0 & N \\ N & \stackrel{\infty}{\lambda} \end{array}$ | $\begin{array}{lc} N & \vec{\circ} \\ \underset{\sim}{0} & 0 \end{array}$ | $\underset{\sim}{\infty} \underset{\sim}{\omega}$ | $0_{0}$ | $\dot{\perp} \frac{\infty}{\dot{\rho}}$ | $\begin{array}{lc} 9 & \text { N } \\ \text { O } \end{array}$ | $\begin{array}{ll} \overrightarrow{+} & \vec{\circ} \end{array}$ | $0_{0}$ | $0_{0}$ | $\begin{array}{ll} \infty \\ \\ 0 \\ \hline \end{array}$ | $\begin{array}{ll} \infty \\ \underset{\omega}{\omega} & \vec{O} \end{array}$ | ¢ N N | $\begin{array}{ll} \dot{\omega} & \vec{N} \\ A & A \\ A \end{array}$ |
| $\begin{array}{ll} \dot{+} & \vec{\circ} \\ \dot{O} & \mathrm{H} \\ \dot{\gamma} & 0 \end{array}$ | . | $\sim$ $N$ $N$ |  | $\begin{array}{ll}\sim \\ 0 & \stackrel{\rightharpoonup}{\text { a }} \\ \text { V }\end{array}$ |  | . | $\begin{array}{ll} \mathrm{N} \\ 0 & \mathrm{~N} \\ \infty & \mathrm{~N} \end{array}$ |  |  |  | . | $\begin{array}{ll}\omega & \text { Y } \\ \text { O } \\ \text { O }\end{array}$ | $\begin{array}{ll} \bullet & \stackrel{\rightharpoonup}{+} \\ \stackrel{\rightharpoonup}{\omega} & 0 \\ \hline \end{array}$ | $$ |  |
| Oి | . | $\begin{aligned} & \text { O} \\ & \text { Ǹ } \end{aligned}$ | $\stackrel{0}{0}$ | $8$ | 옹 | . | O-ి | ㅇ | 8 | . | . | 응 | O | $\bigcirc$ | $\begin{aligned} & \text { No } \\ & \text { N } \end{aligned}$ |
| $\pm$ | $\bigcirc$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\cdots$ | O | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | O | O | $\xrightarrow{+}$ | $\cdots$ | $\rightarrow$ | $\cdots$ |
| ¢ © | . | ¢ 0 | $\stackrel{\rightharpoonup}{\bullet}$ | $\stackrel{\odot}{\square}$ | $\stackrel{y}{\square}$ | . | V 0 | $\bigcirc$ | $\stackrel{\odot}{+}$ | . | . | $\checkmark$ ¢ | $\bigcirc$ ¢ | ¢ | $\stackrel{\infty}{\square} \dot{\infty}$ |
| - $\sigma$ | . |  |  | $\infty$ $\omega$ 0 $\infty$ $\infty$ 0 $\vdots$ $\underset{\sim}{1}$ | $\stackrel{\rightharpoonup}{\omega}$ <br> 0 <br>  <br> + <br> + <br> $N$ <br> $\omega$ | . |  | $\begin{aligned} & \text { N } \\ & \text { N } \\ & \text { M } \\ & \text { M } \\ & + \\ & \infty \\ & \infty \end{aligned}$ | $$ | . | . | $$ | $\stackrel{\rightharpoonup}{\pi}$ 0 + 0 0 0 |  | ৪ |
| ㅇ | . | 8 | 8 | 8 | 8 | . | 8 | 8 | 8 | . | . | 8 | ㅇㅇ | 앙 | 8 |
| - $\sigma$ | . | - $\sigma$ | - $\sigma$ | ' $\sigma$ | ${ }^{\circ}$ | . | ${ }^{\circ}$ | ${ }^{\circ}$ | ${ }^{\circ}$ | . | . | ' $\sigma$ | ${ }^{\circ}$ | ${ }^{\circ}$ | ${ }^{\circ}$ |


| [Pa_Appealinglogo $=2]$ | $\begin{gathered} 321 . \\ 907 \end{gathered}$ | . 000 |  |  |  | $6.346 \mathrm{E}+139$ | 6.346 $E+139$ | 6.346 $E+139$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Pa_Appealinglogo | 291. | 457.3 |  |  | . 5 |  | 2.986 | b |
| =3] | 854 | 25 | . 407 |  | 23 | 5.633E+126 | E-263 |  |
| [Pa_Appealinglogo | 266. | 261.7 |  |  | . 3 |  | 6.203 |  |
| =4] | 242 | 89 | 1.034 |  | 09 | $4.242 \mathrm{E}+115$ | E-108 |  |
| [Pa_Appealinglogo $=5]$ | $0^{\text {c }}$ |  |  |  |  |  |  |  |
| [Pa_Creativeslogan |  | 2503 | . 000 |  | . 9 | $2.070 \mathrm{E}+206$ | . 000 | b |
| $s=1]$ | 060 | 8.503 |  |  | 85 |  |  |  |
| [Pa_Creativeslogan | 317. | . 000 |  | 1 |  | $5.627 \mathrm{E}+137$ | 5.627 | 5.627 |
| $\mathrm{s}=2]$ | 182 | . 000 |  | T |  | 5.627E+137 | E+137 | E+137 |
| [Pa_Creativeslogan | 249. |  | . 044 |  | . 8 | 6.572E-109 | . 000 | b |
| $\mathrm{S}=3$ ] | 099 | 438 |  |  | 34 |  |  |  |
| [Pa_Creativeslogan | 231. | . 000 |  | 1 |  | $3.003 \mathrm{E}-101$ | 3.003 | 3.003 |
| $\mathrm{s}=4]$ | 461 |  |  |  |  |  | E-101 | E-101 |
| [Pa_Creativeslogan $s=5]$ | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |

a. The reference category is: Est.
b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
$c$. This parameter is set to zero because it is redundant.

## Nominal Regression

Case Processing Summary

|  |  | N | Marginal <br> Percentage |
| :--- | :--- | ---: | ---: |
| Brandpreference | Coke | 223 | $55.8 \%$ |
|  | Pepsi | 125 | $31.2 \%$ |
|  | Est | 52 | $13.0 \%$ |
|  | Strongly Disagree | 14 | $3.5 \%$ |
|  | Disagree | 10 | $2.5 \%$ |
|  | Neutral | 92 | $23.0 \%$ |
|  | Agree | 184 | $46.0 \%$ |


|  | Strongly Agree | 100 | 25.0\% |
| :---: | :---: | :---: | :---: |
|  | Strongly Disagree | 14 | 3.5\% |
|  | Disagree | 17 | 4.2\% |
| Brandidentity | Neutral | 91 | 22.8\% |
|  | Agree | 185 | 46.2\% |
|  | Strongly Agree | 93 | 23.2\% |
|  | Strongly Disagree | 2 | 0.5\% |
|  | Disagree | 21 | 5.2\% |
| Brandpersonality | Neutral | 88 | 22.0\% |
|  | Agree | 212 | 53.0\% |
|  | Strongly Agree | 77 | 19.2\% |
|  | Strongly Disagree | 12 | 3.0\% |
|  | Disagree | 22 | 5.5\% |
| Brandloyalty | Neutral | 62 | 15.5\% |
|  | Agree | 179 | 44.8\% |
|  | Strongly Agree | 125 | 31.2\% |
|  | Strongly Disagree | 10 | 2.5\% |
|  | Disagree | 29 | 7.2\% |
| Brandrelevance | Neutral | 116 | 29.0\% |
|  | Agree | 162 | 40.5\% |
|  | Strongly Agree | 83 | 20.8\% |
| Valid |  | 400 | 100.0\% |
| Missing |  | 0 |  |
| Total |  | 400 |  |
| Subpopulation |  | $97^{\text {a }}$ |  |

a. The dependent variable has only one value observed in 68 (70.1\%) subpopulations.

Model Fitting Information


## Pseudo R-Square

| Cox and Snell | .440 |
| :--- | ---: |
| Nagelkerke | .495 |


| Likelihood Ratio Tests |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Effect | Model Fitting | Likelihood Ratio Tests |  |  |
|  | -2 Log <br> Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Be_Brandawareness | 406.178 | 13.808 | 8 | . 087 |
| Be_Brandidentity | 405.770 | 13.399 | 8 | . 099 |
| Be_Brandpersonality | 417.555 | 25.184 | 8 | . 001 |
| Be_Brandloyalty | 422.720 | 30.350 | 8 | . 000 |
| Be_Brandrelevance | 419.411 | 27.041 | 8 | . 001 |

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0 .

Parameter Estimates

| Brandpreference ${ }^{\text {a }}$ | B | Std. <br> Error | Wald | $\left\lvert\, \begin{aligned} & \mathrm{d} \\ & \mathrm{f} \end{aligned}\right.$ | Sig. | $\operatorname{Exp}(\mathrm{B})$ | 95\% <br> Confidence Interval for Exp(B) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Lowe <br> r <br> Boun <br> d | Uppe <br> r <br> Boun <br> d |
| [Be_Brandawarenes $\mathrm{S}=1 \text { ] }$ | 69.67 | $\begin{array}{r} 15631.0 \\ 36 \end{array}$ | . 000 | 1 | . 996 | 5.532E-031 | . 000 | b |
| [Be_Brandawarenes <br> Cok $\mathrm{s}=2]$ | 20.05 | $\begin{array}{r} 9324.31 \\ 5 \end{array}$ | . 000 | 1 | . 998 | 1.951E-009 | . 000 | . |
| [Be_Brandawarenes $s=3]$ | . 092 | . 570 | . 026 | 1 | . 872 | 1.097 | . 359 | 3.352 |
| [Be_Brandawarenes $\mathrm{s}=4$ ] | . 653 | . 544 | 1.444 | 1 | . 229 | 1.922 | . 662 | 5.580 |




a. The reference category is: Est.
b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
c. This parameter is set to zero because it is redundant.

## Nominal Regression

| Case Processing Summary |  |  |  |
| :--- | :--- | ---: | ---: |
|  |  | N | Marginal <br> Percentage |
| Brandpreference | Coke | 223 | $55.8 \%$ |
|  | Pepsi | 125 | $31.2 \%$ |
|  | Est | 52 | $13.0 \%$ |
|  | Strongly Disagree | 13 | $3.2 \%$ |
| cultureandsocialenvironmen | Disagree | 46 | $11.5 \%$ |
| t | Neutral | 101 | $25.2 \%$ |
|  | Agree | 190 | $47.5 \%$ |
|  | Strongly Agree | 50 | $12.5 \%$ |
|  | Strongly Disagree | 9 | $2.2 \%$ |
|  | Disagree | 44 | $11.0 \%$ |
| subculture | Neutral | 101 | $25.2 \%$ |
|  | Agree | 187 | $46.8 \%$ |
|  | Strongly Agree | 59 | $14.8 \%$ |
|  | Strongly Disagree | 14 | $3.5 \%$ |
|  | Disagree | 39 | $9.8 \%$ |
| socialclasses | Neutral | 111 | $27.8 \%$ |
|  | Agree | 172 | $43.0 \%$ |


| culturaltrends | Strongly Agree | 64 | 16.0\% |
| :---: | :---: | :---: | :---: |
|  | Strongly Disagree | 11 | 2.8\% |
|  | Disagree | 32 | 8.0\% |
|  | Neutral | 120 | 30.0\% |
|  | Agree | 191 | 47.8\% |
|  | Strongly Agree | 46 | 11.5\% |
|  | Strongly Disagree | 8 | 2.0\% |
|  | Disagree | 15 | 3.8\% |
| Family | Neutral | 95 | 23.8\% |
|  | Agree | 204 | 51.0\% |
|  | Strongly Agree | 78 | 19.5\% |
|  | Strongly Disagree | 18 | 4.5\% |
|  | Disagree | 23 | 5.8\% |
| Socialrolesandstatus | Neutral | 134 | 33.5\% |
|  | Agree | 173 | 43.2\% |
|  | Strongly Agree | 52 | 13.0\% |
|  | Strongly Disagree | 18 | 4.5\% |
|  | Disagree | 31 | 7.8\% |
| Peereffects | Neutral | 122 | 30.5\% |
|  | Agree | 165 | 41.2\% |
|  | Strongly Agree | 64 | 16.0\% |
|  | Strongly Disagree | 4 | 1.0\% |
|  | Disagree | 37 | 9.2\% |
| Ageandwayoflife | Neutral | 78 | 19.5\% |
|  | Agree | 182 | 45.5\% |
|  | Strongly Agree | 99 | 24.8\% |
|  | Strongly Disagree | 4 | 1.0\% |
|  | Disagree | 35 | 8.8\% |
| Purchasingpower | Neutral | 65 | 16.2\% |
|  | Agree | 205 | 51.2\% |
|  | Strongly Agree | 91 | 22.8\% |
|  | Strongly Disagree | 9 | 2.2\% |
|  | Disagree | 20 | 5.0\% |
| lifestyle | Neutral | 67 | 16.8\% |
|  | Agree | 213 | 53.2\% |
|  | Strongly Agree | 91 | 22.8\% |
|  | Strongly Disagree | 7 | 1.8\% |
|  | Disagree | 27 | 6.8\% |
| Personalityandselfconcept | Neutral | 68 | 17.0\% |
|  | Agree | 199 | 49.8\% |
|  | Strongly Agree | 99 | 24.8\% |


|  | Strongly Disagree | 5 | 1.2\% |
| :---: | :---: | :---: | :---: |
|  | Disagree | 31 | 7.8\% |
| Motivation | Neutral | 127 | 31.8\% |
|  | Agree | 174 | 43.5\% |
|  | Strongly Agree | 63 | 15.8\% |
|  | Strongly Disagree | 4 | 1.0\% |
|  | Disagree | 47 | 11.8\% |
| Perception | Neutral | 124 | 31.0\% |
|  | Agree | 156 | 39.0\% |
|  | Strongly Agree | 69 | 17.2\% |
|  | Strongly Disagree | 10 | 2.5\% |
|  | Disagree | 60 | 15.0\% |
| Learning | Neutral | 128 | 32.0\% |
|  | Agree | 130 | 32.5\% |
|  | Strongly Agree | 72 | 18.0\% |
|  | Strongly Disagree | 3 | 0.8\% |
|  | Disagree | 40 | 10.0\% |
| Beliefsandattitudes | Neutral | 91 | 22.8\% |
|  | Agree | 199 | 49.8\% |
|  | Strongly Agree | 67 | 16.8\% |
| Valid |  | 400 | 100.0\% |
| Missing |  | 0 |  |
| Total |  | 400 |  |
| Subpopulation |  | $176{ }^{\text {a }}$ |  |

a. The dependent variable has only one value observed in 161 (91.5\%)
subpopulations.

Model Fitting Information


Pseudo R-Square

| Cox and Snell | .669 |
| :--- | :--- |
| Nagelkerke | .752 |
| McFadden | .503 |

Likelihood Ratio Tests

| Effect | Model Fitting | Likelihood Ratio Tests |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | -2 Log <br> Likelihood of Reduced Model | Chi-Square | df | Sig. |
| Cf_cultureandsocialenviron ment | $414.044^{\text {a }}$ | 40.322 | 8 | . 000 |
| Cf_subculture | $412.564^{\text {a }}$ | 38.843 | 8 | . 000 |
| Cf_socialclasses | $398.035^{\text {a }}$ | 24.314 | 6 | . 000 |
| Cf_culturaltrends | $388.687^{\text {a }}$ | 14.965 | 6 | . 021 |
| Sf_Family | $384.662^{\text {a }}$ | 10.940 | 8 | . 205 |
| Sf_Socialrolesandstatus | $411.142^{\text {a }}$ | 37.421 | 6 | . 000 |
| Sf_Peereffects | $384.513^{\text {a }}$ | 10.792 | 6 | . 095 |
| Pf_Ageandwayoflife | 395.414 | 21.693 | 8 | . 006 |
| Pf_Purchasingpower | $385.922^{\text {a }}$ | 12.200 | 8 | . 142 |
| Pf_lifestyle | 436.571 | 62.849 | 8 | . 000 |
| Pf_Personalityandselfconce pt | 410.625 | 36.904 | 6 | . 000 |
| Ps_Motivation | $380.545^{\text {a }}$ | 6.823 | 6 | . 337 |
| Ps_Perception | $390.950^{\text {a }}$ | 17.229 | 6 | . 008 |
| Ps_Learning | $403.826^{\text {a }}$ | 30.105 | 8 | . 000 |
| Ps_Beliefsandattitudes | $384.850^{\text {a }}$ | 11.129 | 6 | . 084 |

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0 .
a. Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.

Parameter Estimates

| Brandpreference $^{\text {a }}$ | B | Std. <br> Error | W <br> ald | d | fi | Exp(B) | g. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | | $95 \%$ <br> Confidence <br> Interval for <br> Exp(B) |
| :---: |



| $\Omega$ | $\bigcirc$ ． | $\begin{aligned} & \hline \stackrel{\circ}{6} \\ & \stackrel{0}{N} \end{aligned}$ | \％ |  | $\bigcirc$ ． | $\bigcirc$ ． | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \hline \% \\ & \dot{\circ} \\ & \dot{F} \end{aligned}$ |  | $\bigcirc$ ． | $\Omega$ ． | $\underset{\underset{N}{\sim}}{\underset{\sim}{N}}$ | $\begin{aligned} & \stackrel{N}{\circ} \\ & \text { ले } \end{aligned}$ | － | $\bigcirc$ ． | $\bigcirc$ ． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $8$ | $8$ | $8$ | $8$ |  | $8$ | $8$ | $\begin{aligned} & \infty \\ & \hline \end{aligned}$ | 人 |  | $8$ | $8$ | $\stackrel{\varphi}{\Gamma}$ | $\stackrel{\circ}{\circ}$ |  | 8 | 8 |
|  | R <br> 0 <br> $\dot{1}$ <br> 0 <br> 0 <br> 0 <br> 0 <br> $\infty$ | $\stackrel{\stackrel{\rightharpoonup}{\mathrm{N}}}{\mathrm{~V}}$ | ষ |  |  |  | $\begin{aligned} & \text { No } \\ & \\ & \infty \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\underset{N}{*}} \\ & \dot{\circ} \end{aligned}$ |  |  | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\circ} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\circ} \\ & \dot{\sim} \end{aligned}$ | ֵon |  |  | 8 <br> 8 <br> 8 <br>  <br>  <br> 10 <br> 1 |
| இの ${ }^{\text {® }}$ | $8{ }^{\circ}$ | $\stackrel{\infty}{\square}$ | \％～ |  | \％${ }^{+}$ | ®® 9 | へ̣ ${ }^{\infty}$ | O～ |  | இ\％${ }^{\circ}$ | ® ${ }^{\circ}$ | フั～ | $\hat{¢}^{\circ}$ |  | 8 ${ }^{\text {® }}$ | 8 ${ }^{\circ}$ |
| － | － | － | － | 0 | － | － | － | － | $\bigcirc$ | － | － | － | － | $\bigcirc$ | － | － |
| 80 | 80 | $\stackrel{\text { ¢ }}{\sim}$ | $\stackrel{\sim}{\circ}$ ¢ |  | 80 | 80 | $\stackrel{\text { F }}{\sim}$ | $\stackrel{\square}{+} \times$ |  | 80 | 80 | ¢＋ | ¢ $\quad$ ¢ |  | 80 | 80 |
| $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | $\dot{\underset{\sim}{\circ}} \stackrel{\text { N }}{\sim}$ |  | $\stackrel{\text { ¢ }}{\substack{\text { ¢ }}}$ |  | $\begin{array}{ll} \underset{\sim}{\sim} \\ \underset{\sim}{\sim} & \stackrel{\circ}{0} \\ \hline \end{array}$ | $\underset{\sim}{N} \underset{\sim}{\sim}$ | $\begin{gathered} \stackrel{\Gamma}{N} \\ \stackrel{\rightharpoonup}{\prime} \end{gathered}$ | $\stackrel{\square}{\circ}$ |  | $\begin{array}{lc} \hat{N} \\ \underset{\sim}{\circ} & \stackrel{\rightharpoonup}{\circ} \\ \hline \end{array}$ | $\stackrel{5}{\stackrel{1}{\sim}}$ |  |  |  | $\stackrel{\bullet}{\stackrel{\circ}{N}} \stackrel{m}{+}$ | $\stackrel{\sim}{\Gamma} \stackrel{\infty}{\sim}$ |
|  | $\begin{array}{lc} \infty \\ \underset{\omega}{\infty} & \infty \\ \hline \end{array}$ | ${ }^{\circ}{ }_{\sim}^{\circ} 0$ | $\underset{\sim}{\stackrel{\kappa}{N}}$ | $8$ | $\hat{\dot{\circ}}{ }^{\wedge}$ | $\begin{array}{lll} \hline \Omega & \curvearrowleft \\ \stackrel{\oplus}{\circ} & \infty \end{array}$ | $\stackrel{\infty}{\infty} \quad+$ | $\underset{\sim}{\circ}$ | $8$ | $\text { ' } \begin{aligned} & \circ \\ & \dot{\infty} \\ & \hline 0 \end{aligned}$ | - | $\underset{\sim}{\circ} \text { © }$ | $\begin{aligned} & \mathbb{N} \\ & \end{aligned}$ | $\bigcirc$ | $\stackrel{\infty}{6}$ | $\stackrel{\sim}{\underset{\sim}{~}} \text { 「 }$ |
| F <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> $\vdots$ <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




| [Ps_Learning=3] | 3.69 0 | 1.647 | 5.0 18 |  | $\left\lvert\, \begin{array}{r}.02 \\ 5\end{array}\right.$ | 40.049 | 1.58 6 | 1011.1 42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Ps_Learning=4] | 2.11 | 1.432 | $\begin{array}{r} 2.1 \\ 84 \end{array}$ | 1 | 13 9 | . 120 | . 007 | 1.995 |
| [Ps_Learning=5] | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Ps_Beliefsandattitude $\mathrm{s}=1]$ | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Ps_Beliefsandattitude $\mathrm{s}=2]$ | 12.4 01 | $\begin{array}{r} 1165 . \\ 996 \end{array}$ | . 00 | 1 | . 99 | 242951.630 | . 000 | b |
| [Ps_Beliefsandattitude $s=3]$ | 2.79 0 | 1.638 | 2.9 | 1 | .08 8 | . 061 | . 002 | 1.522 |
| [Ps_Beliefsandattitude $s=4]$ | 1.71 2 | 1.564 | $\begin{gathered} 1.1 \\ 97 \end{gathered}$ | 1 | .27 4 | . 181 | . 008 | 3.874 |
| [Ps_Beliefsandattitude $\mathrm{s}=5]$ | $0^{\text {c }}$ |  |  | 0 |  |  | . |  |
| [Cf_cultureandsociale nvironment=1] | 96.8 74 | $\begin{array}{r} 8925 . \\ 528 \end{array}$ | $\begin{array}{r} 00 \\ 0 \end{array}$ | 1 | . 99 | 8.476E-043 | . 000 | b |
| [Cf_cultureandsociale nvironment=2] | 3.93 7 | 3.195 | $\begin{array}{r} 1.5 \\ 18 \end{array}$ |  | . 21 | . 020 | 3.72 $2 \mathrm{E}-$ 005 | 10.226 |
| [Cf_cultureandsociale nvironment=3] | 5.12 3 | 2.234 | 5.2 59 |  | .02 2 | 167.895 | 2.10 6 | 13387. 327 |
| [Cf_cultureandsociale nvironment=4] | 4.17 3 | 1.823 | 5.2 38 |  | . 02 | 64.882 | 1.82 1 | 2311.9 70 |
| Pe <br> [Cf_cultureandsociale |  |  | $\begin{aligned} & 38 \\ & .75 \end{aligned}$ |  |  |  | 1 | 70 |
| psi <br> nvironment=5] | . 947 | 1.087 | 8 |  | . 4 | . 388 | . 046 | 3.269 |
| [Cf_subculture=1] | $\begin{array}{r} 45.4 \\ 39 \end{array}$ | $\begin{array}{r} 9256 . \\ 954 \end{array}$ | $\begin{array}{r} .00 \\ 0 \end{array}$ |  | . 99 | 54207146234371660000.000 | . 000 | b |
| [Cf_subculture=2] | $\begin{array}{r} 17.3 \\ 45 \end{array}$ | $\begin{array}{r} 716.3 \\ 00 \end{array}$ | $\begin{array}{r} 00 \\ 1 \end{array}$ |  | . 98 | 34107352.462 | . 000 | b |
| [Cf_subculture=3] | 2.49 9 | 1.922 | $\begin{array}{r} 1.6 \\ 92 \end{array}$ | 1 | 19 3 | . 082 | . 002 | 3.551 |
| [Cf_subculture=4] | 1.76 7 | 1.082 | 2.6 64 | 1 | $\left\lvert\, \begin{array}{r}.10 \\ 3\end{array}\right.$ | 5.852 | . 701 | 48.829 |

[Cf_subculture=5]


| 11847442.818 | . 000 | b |
| :---: | :---: | :---: |
| 5696346.831 | . 000 | b |
| . 365 | . 022 | 6.053 |
| . 048 | . 003 | . 735 |
| 29928.686 | . 000 | b |
| 3.586E-006 | . 000 | b |
| . 377 | . 018 | 7.792 |
| . 158 | . 014 | 1.773 |
| $4.836 \mathrm{E}-055$ | . 000 | . |
| 4.064 | . 000 | b |
| 5.844 | 126 | 270.34 |
| 4.234 | . 601 | 29.856 |
| $1.031 \mathrm{E}-052$ | . 000 | b |
| 12621.292 | . 000 | . |


|  |  |  | N |  |  | $\because$$\square$ |  |  | ヘ |  | W I 0 D D D D 0 0 0 0 | ［Sf＿Peereffects＝4］ |  |  |  | ［Sf＿Peereffects＝1］ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0_{0}$ | $0 \text { こे }$ | $\begin{array}{ll}  & 0 \\ & 0 \\ \text { co } \end{array}$ | $\vec{V} \stackrel{\rightharpoonup}{\vec{~}}$ | $\bigcirc$ | $\begin{aligned} & \text { cr } \\ & 0 \\ & 0 \end{aligned}$ | $0_{0}$ | oo | $\begin{array}{cc} \vec{\omega} \\ \dot{o} \end{array}$ | $\begin{array}{ll} 9 \\ \\ \\ \hline \end{array}$ | ¢ $\stackrel{\text { ¢ }}{\text { ¢ }}$ | 0 | $-\stackrel{\rightharpoonup}{\dot{0}}$ | － | $\stackrel{\rightharpoonup}{\sim}$ | N | $\begin{array}{ll} \omega \\ \underset{\sim}{\prime} \\ \text { V } \end{array}$ | $0_{0}$ | $\begin{array}{ll}  \\ \\ & \text { N } \\ 0 \\ \hline \end{array}$ | $\underset{\bullet}{\text { ヘu}}$ |
| ． | $\stackrel{\rightharpoonup}{\stackrel{\rightharpoonup}{\circ}}$ | $\begin{aligned} & n \\ & \stackrel{N}{n} \\ & \stackrel{1}{n} \end{aligned}$ | $\underset{\sim}{\infty} \stackrel{\rightharpoonup}{\infty}$ |  | $$ | ． | $\begin{aligned} & \text { م } \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ | $\bigcirc \stackrel{\text { N }}{\sim}$ | $\stackrel{\rightharpoonup}{\bullet} \stackrel{\rightharpoonup}{\text { U }}$ | $\begin{array}{ll}  & \overrightarrow{ } \\ \dot{\sim} & \stackrel{\rightharpoonup}{0} \\ \text { O } & \end{array}$ | ． | $\begin{aligned} & \text { io } \\ & \stackrel{1}{2} \end{aligned}$ |  | $\frac{\stackrel{\rightharpoonup}{\mathrm{N}}}{\stackrel{\rightharpoonup}{n}}$ | $\bigcirc$ |  | ． | $\begin{aligned} & \underset{\infty}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\infty} \\ & \underset{0}{\infty} \end{aligned}$ |
| ． | O | ○ un | $\bigcirc 8$ |  | $\bigcirc \bigcirc$ | ． | $\stackrel{\rightharpoonup}{6} \stackrel{\rightharpoonup}{\circ}$ | N 8 | N 8 | $\bigcirc \bigcirc$ | ． | V ì |  | N io | $\bigcirc \bigcirc$ | $\bigcirc$－ | ． |  | ＋ 0 |
| $\bigcirc$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ |  | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ |  | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ | $\rightarrow$ |
| ． |  | $\omega \text { ì }$ |  |  | $8 \quad \stackrel{\rightharpoonup}{\circ}$ | . | の ஸ் | - ל் | c è | o © |  | $\infty \text { ĩ }$ |  | $N \stackrel{\text { ஸे }}{\dot{\perp}}$ | $0 \text { © í }$ | の |  | $0 \stackrel{\circ}{-}$ | $\checkmark \text { ฺ }$ |
| ． | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \omega \\ & \infty \\ & 0 \\ & \infty \\ & \infty \\ & \infty \\ & \infty \\ & \hline \end{aligned}$ |  |  | 앙 | ． | $\stackrel{\rightharpoonup}{\oplus}$ | $\infty$ 0 0 +1 +1 $\underset{\sim}{1}$ |  | $\infty$ <br> + <br> 0 <br> 0 <br> 0 <br> 0 <br>  <br> $\omega$ | ． | $\begin{aligned} & N \\ & \stackrel{0}{\infty} \\ & \infty \end{aligned}$ |  | $\underset{\sim}{\omega}$ | $\omega$ <br> 0 <br> 0 <br> + <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 |  | ． | － | po |
| ． | $\begin{aligned} & \text { oj } \\ & \mathrm{M} \end{aligned}$ | $\begin{array}{r} \stackrel{N}{\omega} \\ -\quad 1 \end{array}$ | $8$ |  | \% | ． | -৩ | $\begin{array}{lll} N & \text { Y } & \omega \\ \sim & 1 & 0 \\ \hline \end{array}$ | O | 응 | ． | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{N}} \\ & \mathrm{M} \end{aligned}$ |  | Oి | 응 | O | ． | $\stackrel{\bigcirc}{\text { N}}$ | ì |
| ． | +0 0 0 0 | A $\begin{aligned} & \text { ¢ } \\ & \text { N } \\ & \text { N } \\ & \text { N }\end{aligned}$ | ${ }^{\circ}$ |  | ＇$\sigma$ | ． | $\begin{gathered} N \\ \stackrel{N}{\omega} \end{gathered}$ |  | ${ }^{\circ}$ | ${ }^{\circ}$ | ． | $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & 0 \\ & \underset{\sim}{0} \end{aligned}$ |  | $\begin{aligned} & \omega \\ & \stackrel{\rightharpoonup}{\omega} \\ & \hline \end{aligned}$ | ＇$\sigma$ | ＇$\sigma$ | ． | $\begin{aligned} & \text { in } \\ & \text { ति } \end{aligned}$ | $\begin{aligned} & \underset{\sim}{\omega} \\ & \underset{\rightharpoonup}{\mid} \\ & \hline \end{aligned}$ |

［Pf＿lifestyle＝1］
P＿lifestyle＝2］
f＿lifestyle＝3］
［Pf＿lifestyle＝4］
［Pf＿lifestyle＝5］
［Pf＿Personalityandself concept＝1］
［Pf＿Personalityandself
concept＝2］
［Pf＿Personalityandself
concept＝3］
［Pf＿Personalityandself
concept＝4］
［Pf＿Personalityandself
concept＝5］
［Ps＿Motivation＝1］
［Ps＿Motivation＝2］
［Ps＿Motivation＝3］
［Ps＿Motivation＝4］
［Ps＿Motivation＝5］
［Ps＿Perception＝1］
［Ps＿Perception＝2］

| $\begin{aligned} & \text { N } \\ & +{ }_{N}^{\prime} \end{aligned}$ | $\stackrel{\infty}{\infty} \stackrel{\infty}{-}$ | 0 | $\text { の } \stackrel{\rightharpoonup}{\mathrm{g}}$ | $\begin{array}{r} N \\ - \\ \end{array}$ | $\begin{aligned} & \text { N } \\ & \text { O } \\ & \text { O } \end{aligned}$ | $\stackrel{\stackrel{\rightharpoonup}{+}}{\stackrel{\omega}{\sigma}}$ | 0 | $\stackrel{\rightharpoonup}{\circ}$ | $\text { G } \stackrel{+}{-}$ |  | $\begin{aligned} & \omega \\ & 0 \\ & \hline \end{aligned}$ | － | $\stackrel{9}{\stackrel{\circ}{V}}$ |  | O | $\omega$ | $\begin{aligned} & \omega \\ & 0 \\ & \hline \end{aligned}$ | $\omega$ | $\stackrel{\rightharpoonup}{\stackrel{\rightharpoonup}{\omega}}$ | g | Co |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\text { v } \stackrel{\ominus}{\stackrel{\circ}{\circ}}$ | $\begin{array}{ll} \stackrel{\rightharpoonup}{\infty} \\ \stackrel{\circ}{\circ} \\ \stackrel{0}{0} \\ \hline 0 \end{array}$ |  | $\underset{\underset{\sim}{\vec{a}}}{\stackrel{\rightharpoonup}{2}}$ | $\begin{aligned} & 0 \\ & 0 \\ & \hline 8 \end{aligned}$ | $\begin{array}{ll} \text { os } \\ \text { 호 } \end{array}$ | $\begin{array}{ll} \mathrm{N} \\ \text { @ } \\ \hline \\ \hline \end{array}$ | ． | $\stackrel{\oplus}{\omega}$ |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{N} \\ & \stackrel{N}{n} \end{aligned}$ |  | $8$ |  | ． |  | $\stackrel{\stackrel{\rightharpoonup}{0}}{\sim}$ |  | $\stackrel{\stackrel{\rightharpoonup}{\infty}}{\substack{0 \\ \hline}}$ |  |  |  |  | － |
| － 8 | 08 |  | $\stackrel{\circ}{\circ} \stackrel{\square}{\circ}$ | $\xrightarrow{\sim} \stackrel{\rightharpoonup}{\text { v }}$ | 08 | 08 |  | － | の 8 | 9 |  |  | ． |  |  | $\stackrel{\square}{1}$ | $\stackrel{\square}{\square}$ | $\bigcirc$ | 93 |  | － 8 |  |  | 8 |
| － | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\rightarrow$ | $\bigcirc$ | $\rightarrow$ | $\rightarrow$ |  | $\rightarrow$ |  | $\rightarrow$ |  | $\bigcirc$ |  | $\rightarrow$ |  | $\rightarrow$ |  | $\rightarrow$ |  | － |  |
| ＋$\quad 8$ | の ${ }^{\circ}$ | ． | $\nu \stackrel{\text { ¢ }}{ }$ | $0 \dot{\vec{\circ}}$ | $\omega \stackrel{\circ}{\infty}$ | $\infty \ddot{\infty}$ | ． | $\bigcirc \stackrel{+}{+}$ | $\bigcirc \stackrel{\circ}{+}$ | $\omega$ | $\stackrel{\rightharpoonup}{\omega}$ |  | ． |  | ． | $\bigcirc$ | N | － | $\stackrel{\text { ¢ }}{ }$ |  | $\bigcirc$ |  | の | ¢ |


| $\begin{aligned} & N \\ & \text { N} \\ & \stackrel{1}{*} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | ． | $\begin{aligned} & 0 \\ & \omega \\ & \perp \\ & \perp \end{aligned}$ | $\begin{aligned} & \vec{~} \\ & \dot{0} \\ & 0 \end{aligned}$ |  | $\omega$ $\omega$ $\omega$ $\omega$ + + $\stackrel{\rightharpoonup}{\omega}$ | ． | ì |  | へ్ত | ¢ | ． | N $\stackrel{\rightharpoonup}{+}$ V | $\begin{aligned} & \stackrel{\rightharpoonup}{\rightharpoonup} \\ & \stackrel{\rightharpoonup}{N} \end{aligned}$ | $\stackrel{\rightharpoonup}{\infty}$ ヘ in N |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% | \％ | ． | No | $\begin{aligned} & \text { N్ర } \\ & \text { On } \end{aligned}$ | $\%$ | 8 | ． | $\stackrel{\rightharpoonup}{+}$ | $8$ | \％ | － | ． | －$\stackrel{\rightharpoonup}{\text { a }}$ | $\underset{\infty}{\stackrel{\rightharpoonup}{\infty}}$ | \％ | \％ |
| $\cdot{ }^{\circ}$ | ＇$\sigma$ | ． | $\begin{array}{r} \stackrel{\rightharpoonup}{N} \\ \\ 0 \quad \stackrel{0}{\circ} \end{array}$ | $\begin{array}{r} \stackrel{\leftrightarrow}{\oplus} \\ \stackrel{\stackrel{1}{\sigma}}{2} \end{array}$ | ＇$\sigma$ | － | ． | $\begin{aligned} & \text { N } \\ & \text { NO} \end{aligned}$ | ＇$\sigma$ | $\begin{aligned} & \omega \\ & 0 \\ & \text { Gi } \end{aligned}$ | \％ | ． | ¢ $\begin{aligned} & \text { O} \\ & \text { O } \\ & \text { of }\end{aligned}$ | $N \stackrel{\stackrel{\rightharpoonup}{+}}{\stackrel{+}{y}}$ | \％ | $\sigma$ |


| [Ps_Perception=3] | 3.59 | 1.594 | 5.0 86 |  | .02 4 | . 027 | . 001 | . 625 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [Ps_Perception=4] | 1.19 | 1.150 | $\left.\begin{array}{\|r\|} 1.0 \\ 86 \end{array} \right\rvert\,$ |  | .29 7 | . 302 | . 032 | 2.873 |
| [Ps_Perception=5] | $0^{\text {c }}$ |  |  |  |  |  |  |  |
| [Ps_Learning=1] | 99.6 71 | $\begin{array}{r} 7456 . \\ 001 \end{array}$ | $\begin{array}{r} .00 \\ 0 \end{array}$ |  | .98 9 | 5.169E-044 | . 000 | b |
| [Ps_Learning=2] | $\begin{array}{r} 4.96 \\ 5 \end{array}$ | 2.653 | $\left.\begin{array}{r} 3.5 \\ 02 \end{array} \right\rvert\,$ |  | .06 1 | 143.369 | . 790 | 26006. 035 |
| [Ps_Learning=3] | $\begin{array}{r} 1.69 \\ 1 \end{array}$ | 1.681 | $\begin{gathered} 1.0 \\ 13 \end{gathered}$ |  | .31 4 | 5.427 | . 201 | 146.30 0 |
| [Ps_Learning=4] | 2.49 8 | 1.462 | $\left.\begin{array}{r} 2.9 \\ 17 \end{array} \right\rvert\,$ |  | .08 8 | . 082 | . 005 | 1.446 |
| [Ps_Learning=5] | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Ps_Beliefsandattitude $\mathrm{S}=1]$ | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |
| [Ps_Beliefsandattitude $s=2]$ | $\left.\begin{array}{r} 13.7 \\ 62 \end{array} \right\rvert\,$ | $\begin{array}{r} 1165 . \\ 996 \end{array}$ | . 00 | 1 | .99 1 | 948101.763 | . 000 | b |
| [Ps_Beliefsandattitude $\mathrm{s}=3]$ | 1.10 3 | 1.669 | . 43 | 1 | .50 9 | . 332 | . 013 | 8.740 |
| [Ps_Beliefsandattitude $s=4]$ | $\begin{array}{r} 1.27 \\ 6 \end{array}$ | 1.613 | .62 5 | 1 | .42 9 | . 279 | . 012 | 6.594 |
| [Ps_Beliefsandattitude $s=5]$ | $0^{\text {c }}$ |  |  | 0 |  |  |  |  |

a. The reference category is: Est.
b. Floating point overflow occurred while computing this statistic. Its value is therefore set to system missing.
c. This parameter is set to zero because it is redundant.

## Crosstabs

Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Gender * Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Maritalstatus * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  |  |  |  |  |  |
| Age * Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Education * |  |  |  |  |  |  |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Occupation * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference | 400 | 100.0\% |  |  |  | 100.0\% |
| MonthlyIncome * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  |  |  |  |  |  |
| Commonplace * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Consumesoftdrink * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  | 100.0\% |  |  |  |  |
| Visitstores * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference | 400 | 100.0\% |  | 0.0\% | 400 | 100.0\% |
| sizepurchase * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  | 100.0\% | 0 |  | 400 | 100.0\% |
| Amountconsume * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  |  |  |  |  |  |
| Consumeotherbrand * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference |  | 100.0\% |  |  |  |  |
| whydrinksoftdrink * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Influencetodrink* |  | 100.0\% |  |  |  | 100.0\% |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Whypreferabrand * | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% |  | 100.0\% |
| whichotherbrand * |  |  |  |  |  |  |
| Brandpreference | 400 | 100.0\% | 0 | 0.0\% | 400 | 100.0\% |


| identifythedifference * | 400 | $100.0 \%$ | 0 | $0.0 \%$ | 400 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Brandpreference <br> getanotherbrand * | 400 | $100.0 \%$ | 0 | $0.0 \%$ | 400 |
| Brandpreference <br> Effectiveadvertising * | 400 | $100.0 \%$ | 0 | $0.0 \%$ | 400 |
| Brandpreference <br> Attrcativepromotion * <br> Brandpreference | 400 | $100.0 \%$ | 0 | $0.0 \%$ |  |

Gender * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :--- | :--- | ---: | ---: | ---: | :---: |
|  | Coke |  | Pepsi | Est |  |
|  | Male | 52 | 42 | 29 | 123 |
|  | Female | 171 | 83 | 23 | 277 |
| Total |  | 223 | 125 | 52 | 400 |

Maritalstatus * Brandpreference Crosstabulation
Count


Age * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| Age | Less than 16 years | 6 | 6 | 11 | 23 |
|  | 16-20 years | 13 | 6 | 4 | 23 |
|  | 21-25 years | 57 | 29 | 7 | 93 |
|  | 26-30 years | 57 | 38 | 11 | 106 |
|  | 31-35 years | 59 | 26 | 13 | 98 |
|  | more than 35 years | 31 | 20 | 6 | 57 |
| Total |  | 223 | 125 | 52 | 400 |

Highest level of Education * Brandpreference Crosstabulation
Count

|  | Brandpreference |  |  | Total |
| :--- | ---: | ---: | ---: | ---: |
|  | Coke |  | Pepsi |  |

## Occupation * Brandpreference Crosstabulation

Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| Occupation | Business Owner | 20 | 23 | 6 | 49 |
|  | Housewife | 6 | 3 | 0 | 9 |
|  | Student | 48 | 26 | 20 | 94 |
|  | Full time worker | 93 | 53 | 22 | 168 |
|  | Government worker | 36 | 14 | 1 | 51 |
|  | No Job | 4 | 5 | 1 | 10 |
|  | Others | 16 | 1 | 2 | 19 |
| Total |  | 223 | 125 | 52 | 400 |

MonthlyIncome * Brandpreference Crosstabulation
Count


|  | 80,001-100,000Baht | 29 | 5 | 4 | 38 |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | morethan 100,000 Baht | 5 | 11 | 0 | 16 |
| Total |  | 223 | 125 | 52 | 400 |

Commonplace * Brandpreference Crosstabulation
Count


Consumesoftdrink * Brandpreference Crosstabulation
Count


## Visitstores * Brandpreference Crosstabulation

Count

|  | Brandpreference |  |  | Total |
| :--- | ---: | ---: | ---: | ---: |
|  | Coke | Pepsi | Est |  |
| Visitstores Everyday | 7 | 5 | 11 | 23 |


| 5-6 times a week | 12 | 9 | 6 | 27 |
| :--- | ---: | ---: | ---: | ---: |
| $3-4$ times a week | 41 | 26 | 10 | 77 |
| $2-3$ times a week | 56 | 37 | 12 | 105 |
| Once a week | 67 | 23 | 5 | 95 |
| Once a month | 40 | 25 | 8 | 73 |
| Total | 223 | 125 | 52 | 400 |

sizepurchase * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| sizepurchase | 325 ml in can | 84 | 44 | 4 | 132 |
|  | 550 ml in bottle | 66 | 28 | 17 | 111 |
|  | 1.25 litres in bottle | 52 | 44 | 11 | 107 |
|  | 1.45 litres in bottle | 16 | 3 | 9 | 28 |
|  | 2 litres in bottle | 5 | 6 | 11 | 22 |
| Total |  | 223 | 125 | 52 | 400 |

## Amountconsume * Brandpreference Crosstabulation

Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| Amountconsume | 550 ml | 122 | 70 | 19 | 211 |
|  | 1 litre | 47 | 30 | 14 | 91 |
|  | 1.25 litre | 45 | 21 | 12 | 78 |
|  | 2 litre | 9 | 4 | 7 | 20 |
| Total |  | 223 | 125 | 52 | 400 |

## Consumeotherbrand * Brandpreference Crosstabulation

Count

|  |  | Brandpreference |  |  | Total |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Coke |  | Pepsi |  |
| Consumeotherbrand | Sprite | 89 | 43 | 12 | 144 |
|  | Fanta | 89 | 45 | 27 | 161 |


whydrinksoftdrink * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Coke |  | Pepsi | Est |  |
|  | Taste | 56 | 35 | 7 | 98 |
|  | Energy | 31 | 16 | 11 | 58 |
|  | Refreshment | 117 | 64 | 24 | 205 |
|  | Passion | 19 | 10 | 10 | 39 |
| Total | 223 | 125 | 52 | 400 |  |

Influencetodrink * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| Influencetodrink | Friends | 75 | 25 | 8 | 108 |
|  | Family | 49 | 28 | 9 | 86 |
|  | Lifestyle | 89 | 55 | 29 | 173 |
|  | Cultural trends | 7 | 9 | 6 | 22 |
|  | Commercial Advertisements | 3 | 8 | 0 | 11 |
| Total |  | 223 | 125 | 52 | 400 |

Whypreferabrand * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| Whypreferabrand | Refreshing taste | 127 | 64 | 12 | 203 |
|  | Attractive Packaging | 22 | 15 | 11 | 48 |
|  | Attractive Promotion | 21 | 13 | 14 | 48 |
|  | Availability of convenient size | 4 | 9 | 7 | 20 |
|  | Convenient to buy | 37 | 11 | 8 | 56 |
|  | Brand Image | 12 | 13 | 0 | 25 |
| Total |  | 223 | 125 | 52 | 400 |


|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
| whichotherbrand | Coke | 75 | 51 | 14 | 140 |
|  | Pepsi | 74 | 43 | 23 | 140 |
|  | Est | 38 | 20 | 15 | 73 |
|  | Others | 36 | 11 | 0 | 47 |
| Total |  | 223 | 125 | 52 | 400 |

identifythedifference * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Coke |  | Pepsi | Est |  |
|  | Yes | 154 | 77 | 26 | 257 |
|  | No | 36 | 22 | 6 | 64 |
|  | Not sure | 33 | 26 | 20 | 79 |
| Total | 223 | 125 | 52 | 400 |  |

getanotherbrand * Brandpreference Crosstabulation
Count


Effectiveadvertising * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Coke |  | Pepsi | Est |  |
|  | Commercials | 135 | 66 | 35 | 236 |
|  | Web advertising | 41 | 25 | 12 | 78 |
|  | Billboards | 37 | 24 | 5 | 66 |
|  | Print advertising | 10 | 10 | 0 | 20 |

Attrcativepromotion * Brandpreference Crosstabulation
Count

|  |  | Brandpreference |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coke | Pepsi | Est |  |
|  | Buy 1 get 1 | 116 | 59 | 22 | 197 |
|  | Cash discount | 52 | 27 | 14 | 93 |
| Attractivepromotion | Buy combo pack of two in less amount | 38 | 23 | 12 | 73 |
|  | Get more quantity in same price | 17 | 16 | 4 | 37 |
| Total |  | 223 | 125 | 52 | 400 |

Questionnaire<br>A study of Consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands)<br>in Bangkok, Thailand. การศึกษาพฑติกรรมผู้บริโภกเกี่ยวกับการตัตสินใจซื้อครื่องดื่มประะภท น้ำอัดลม โดยเฉพาะ เป็ปซี่, โค้ก และ เอส (เป็นที่นิยม3ยี่ห้อ) ในเขตกรุงเทพมหานคร ประเทศไทย

Direction: This questionnaire will be used for an Independent study by a graduate student of Master of Business Administration, International Program at Bangkok University. It is a part of BA715 "Independent Study" in order to examine the study of consumer brand choice decision in carbonated soft drinks in particular Pepsi, Coke and Est (top 3 brands) in Bangkok, Thailand. คำแนะนำ : แบบสอบถามดบับนี้จะใช้ในการึึกบา วิชาการศึกษบาค้นคว้า อิสระ โดยนักศึกษาระดับปริญูญูโท ภาคนานาชาติ คณะบริหารโุรกิจ มหาวิทยาลัยกรุงเทพ ซึ่งอู่ในส่วนของ วิชา BA715 การศึกษกค้นคว้อิกระะเพื่อที่จะตรวจสอบพฤคิกรรมผู้าริโกคกเกี่ยวกับการตัตสินใจซื้อเครื่องดื่ม ประเภทน้ำอัดลม โดยยฉพาะ เป๊ปซี่, โค้ก และ เอส (เป็นที่นิยม3ยี่น้อ) ในเขตกรุงทพมหานคร ประเทศไไทย

The questionnaire is composed of 6 parts: แบบสอบกามดบับนี้ ประกอบด้วย 6 ส่วน ดังนี้

PART 1: Brand Preference ความหื่นชอบในยี่ท้อ
PART 2: Factors influencing in brand choice decision ปัจจังที่มี่อิทธิพลต่อการ ตัดสินใจลือกกี่ที้อ

PART 3: Demographics ประชากร
PART 4: Factors influencing in brand choice decision (4 P's Marketing Mix) ปัจััยที่มีอิกธิพลต่อการตัศสินใจซื้อยี่ท้อ (ตามหลัก $4 P^{\prime} \mathrm{S}$ ส่วนแบ่งการตลาด)

PART 5: Factors affecting in making brand choice decision ปัจจัยที่มีผลต่อการทำ การัดสินใจเลือกยี่ที้อ

PART 6: Consumer Behavior พฤคิกรรมผู้ทริโภค
Part1. Brand Preference ส่วนที่ 1 ความชื่นชอบในยี่ห้อ

1. Which brand do you prefer more in soft drinks? (Select only one) น้ำอัดลม ยี่ห้ออะไรที่คุณชื่นชอบมาก? (เลือกเพียง 1 ข้อเท่านั้น )

$\square$
Coke โค้ก

Pepsi เป๊ปปซี่
Est เอส

Part2. Factors which influence your choice decision towards top 3 brands of carbonated soft drinks? ส่วนที่ 2 ปัจจัยอะไรที่มีอิทธิพลตัวเลือกในการตัดสินใจเกี่ยวกับน้ำอัดลมทั้ง 3 ยี่ห้อ

Please indicate your response of what factors influence your choice decisions towards carbonated soft drinks กรุณแแสดงผลสะท้อนของคุณว่า ปัจััยอะไรที่มีอิทธิพลตัวเลือกในการตัคสินใจเกี่ยวกับน้ำอัดลม
( $0=$ No effect ไมมี่ผล, $1=$ Not at all important ไม่ลิาคัญ, $2=$ Less important สำคัญน้อยมาก, $3=$ Slightly important สัาคัญเล็กน้อย, $4=$ Neutral ปานกลาง, $5=$ Moderately important, $6=$ Very important สำคัญมาก, $7=$ Extremely important สำคัญอย่างยิ่ง)

|  |  |  | 0 | 1 | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Part3. Demographics ส่วนที่ 3 ประชากร
12. Gender เพศ
$\square$ Male ชาย
$\square$ Female หญิง
13. Marital Status สถานะ
$\square$ Singleโสด
$\square$ Married แต่งงาน
$\square$ Divorced หย่า
$\square$ Widowed ม่าย
14. Age อายุ
$\square$ Less than 16 years น้อยกว่า 16 ปี
$\square 16-20$ years $16-20$ ปี $\square$ 21-25 years 21-25 ปี
$\square$ 26-30 years 26-30 ปี
$\square 31-35$ years $31-35$ ปี $\square$ more than 35 years มากกว่า 35 ปี
15. Highest level of Education การศึกษาสูงสุด

$\square$Primary / Middle schoolประถมศึกษา/มัธยมต้นHigh school or equal มัธยมปลาย/เทียบเท่า
$\square$ Diploma/ College ปวส./ปวช.
$\square$ Bachelor's degree ปริญญาตรี
$\square$ Master degree ปริญญาโท
$\square$ Doctoral degree ปริญญาเอก
$\square$ Others อื่นๆ
16. Occupation อาชีพ

| $\square$ Business owner ธุรกิจส่วนตัว | $\square$ | Housewife แม่บ้าน |
| :--- | :--- | :--- |
| $\square$ Student นักเรียน | $\square$ | Full time worker พนักงานทั่วไป |
| $\square$ Government Worker ข้าราชการ | $\square$ | No Job ว่างงาน |
| $\square$ Others อื่นๆ |  |  |

17. Monthly Income level ระดับเงินเดือน
$\square$ Below 15,000 baht ต่ำกว่า 15,000 บาท$15,001-30,000$ baht 15,001-30,000 บาท
$\square 31,001-50,000$ baht 31,001-50,000 บาท
$\square 50,001-80,000$ baht 50,001-80,000 บาท
$80,001-100,000$ baht 80,001-100,000 บาท
more than 100,000 baht มากกว่า
100,000 บาท

## PART 4: Factors influencing in making Brand Choice Decision (4 P's Marketing Mix)

 ส่วนที่ 4 ปัจจัยที่มีอิทธิพลต่อการตัดสินใจซื้อผลิตภัณท์ (ตามหลัก 4 P 's ส่วนแบ่งการตลาด)I think these factors affect my choice decision ฉันคิดว่าบัจจัยส่วนนี้มีผลต่อการตัดสินใจเลือกโดยให้ คะแนนดังนี้ ( $1=$ Strongly Disagree ไม่เห็นด้วยอย่างธิ่ง, $2=$ Disagree ไม่เห็นด้วย, $3=$ Neutral เฉยๆ , 4= Agree เห็นด้วย, $5=$ Strongly Agree เ ห็นด้วยอย่างยิ่ง )

| Important Influence Factors in making brand choice decision ปัจจัยสำคัญที่มีอิทธิพล ในการตัดสินใจเลือกยี่ห้อ | Opinion Level |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Marketing Mix : Brand choice decision in carbonated soft drinks ส่วนแบ่งการตลาด: การตัดสินใจเลือกเครื่องดื่มน้ำอัดลม | 1 | 2 | 3 | 4 | 5 |
| Product ผลิตภัณฑ์ |  |  |  |  |  |
| 18. Brand name ยี่ห้อ |  |  |  |  |  |
| 19. Product quality (taste \& flavour) คุณภาพของ ผลิตภัณฑ์ รสชาติ/กลิ่นรส |  |  |  |  |  |
| 20. Product variety ความหลากหลายของ ผลิตภัณฑ์ |  |  |  |  |  |
| 21. Availability of convenient size ขนาดให้ เลือกหลายขนาด |  |  |  |  |  |
| Price ราคา |  |  |  |  |  |
| 22. Competitive Price ราคาสมเหตุผล |  |  |  |  |  |
| 23. Cheaper than its competitors ถูกกว่าคู่ ยี่ห้ออื่น |  |  |  |  |  |
| 24. Good Value คุณภาพเหมาะสมกับราคา |  |  |  |  |  |
| Place สถานที่ |  |  |  |  |  |
| 25. Accessibility สถานที่จัดจำหน่ายสะดวกต่อการ เข้าไปใช้บริการ |  |  |  |  |  |
| 26. Merchandising Display การตกแต่งชั้นวาง สินค้า สร้างแรงจูงใจต่อการเลือกซื้อสินค้า |  |  |  |  |  |


| 27.Convenient hours สะดวกสบายและ ประหยัดเวลาในการเลือกซื่อสินค้า |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Promotion โปร โิมชั่น |  |  |  |  |  |
| 28. Discount ส่วนลด |  |  |  |  |  |
| 29. Cash coupons or gift vouchers คูปอง เงินสด หรือ บัตรกำนัล |  |  |  |  |  |
| 30. Attractive advertisement โฆษณาน่า ดึงคูดใจ |  |  |  |  |  |
| 31. Brand endorsements by celebrities ย่่ห้อรับรองโดยคารา |  |  |  |  |  |
| Packaging บรรจัจัณฑ์ |  |  |  |  |  |
| 32. Trendy Packaging บรรจุภัณท์ที่ทันสมัย |  |  |  |  |  |
| 33. Appealing logo โลโก้สินค้าน่าดึงดูด |  |  |  |  |  |
| 34. Creative slogans คำโมษณาสร้างสรรค์ |  |  |  |  |  |
| 35. Variety of size ขนาดของบรรจุภัณพ์มีเห้เลือก หลากหลาย |  |  |  |  |  |
| Brand Effects ผลกระทบด้านยี่ท้อ |  |  |  |  |  |
| 36. Brand awareness ความตระหนักใบยี่ย้อ |  |  |  |  |  |
| 37. Brand identity(Brand image)เอกลักษณ์ ย่่ท้อ(รูปลักษมี่ย่ห้อ) |  |  |  |  |  |
| 38. Brand personality(unique characteristics of that brand)ตัวตนยี่ห้อ อย่่ห้อ ที่มีเอกลักษณ์เฉพาะตัว), |  |  |  |  |  |
| 39. Brand loyalty(loyalty towards one brand) ความภักดีในยี่น้อ(ความภักดีในหนึ่งย่ห้อ) |  |  |  |  |  |
| 40. Brand relevance(Brand importance or purpose)ความสัมพันธ์ในยี่ห้อ(ความสัาคัญูของ ยี่น้อและวัตถุประสงค์) |  |  |  |  |  |

## Part 5: Factors affecting in making Brand choice decision in carbonated soft drinks

ส่วนที่ 5 ปัจจัยที่มีผลต่อการทำการตัดสินใจเลือกเครื่องดื่มน้ำอัดลม
I think these factors affect my choice decision จันคิคว่าปัจจัยส่วนนี้มีผลต่อการตัคสินใจเลือกของคัน กรุณาให้ คะแนนความสำคัญูคัี้ี้ ( $1=$ Strongly Disagreeไม่เห็นด้วยอย่างยิ่ง, $2=$ Disagreeไม่เห็นด้วย, $3=$ Neutralเฉยๆ, $4=$ Agreeเห็นด้วย, 5 =Strongly Agreeเห็นด้วยอย่างยิ่ง)

|  | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cultural Factors ปัจจัยวัฒนธรรม |  |  |  |  |  |
| 41. Culture and social environment วัฒนโรรม และ สังคม สิ่งแวคล้อม |  |  |  |  |  |
| 42. Subculture วัตนธรรม (Regional sub cultural differences ) ความแตกต่างของ วัฒนธรรมในพื้นที่ |  |  |  |  |  |
| 43. Social classes ระดับทาสสังคม |  |  |  |  |  |
| 44. Cultural trends แนวโินม ความนิยมทางวัฒนธรรม |  |  |  |  |  |
| Social Factors ปัจจัยทางสังคม |  |  |  |  |  |
| 45. Family ครอบครัว |  |  |  |  |  |
| 46. Social roles and status สภาพสังคม และ สถานะ |  |  |  |  |  |
| 47. Peer effects ผลกระทบความ เท่าเทียม |  |  |  |  |  |
| Personal Factors ปัจจัสส่วนบุคคล |  |  |  |  |  |
| 48. Age and way of lifeอายุ และ การใช้ชีวิต |  |  |  |  |  |
| 49. Purchasing power and revenue พลังการซื้อและรายได้ |  |  |  |  |  |
| 50. Lifestyle วิถีการใช้ชิวิต |  |  |  |  |  |
| 51. Personality and selfconcept บุคลิกภาพและ แนวทาง ส่วนตัว |  |  |  |  |  |
| Psychological Factors ปูจจัยด้านจิ |  |  |  |  |  |
| 52. Motivation แรงจูงงจ |  |  |  |  |  |
| 53. Perception ความมั่นใจ |  |  |  |  |  |
| 54. Learning การีียนรู้ |  |  |  |  |  |
| 55. Beliefs and attitudes ความ เชื่อและทัศนคติ |  |  |  |  |  |

Part 6: Consumer Behavior ส่วนที่ 6 พฤติกรรมผู้บริโภค
56. Where is the most common place that you purchase soft drinks?

สถานที่ใดคุณซื้อน้ำอัดลมเป็นประจำ ?

57. How often do you consume a carbonated soft drink? คุณบริโภคเครื่องดื่มน้ำอัดลมบ่อยเพียงใด?

58. On an average how many times do you visit stores to purchase carbonated soft drinks? โดยเฉลี่ย คุณไปซื้อเครื่องดื่มน้ำอัดลมที่ร้านขายของกี่ครั้ง ?

## $\square$ Everyday ทุกวัน

5-6 times a week 5-6 ครั้งต่อสัปดาห์ 2-3 times a week 2-3 ครั้งต่อสัปดาห์$\square$ 3-4 times a week 3-4 ครั้งต่อสัปดาห์$\square$ Once a week สัปดาห์ละครั้ง $\square$ Once a month เดือนละครั้ง
59. What pack size of carbonated soft drinks do you normally purchase?

โดยปกติคุณซื้อเครื่องดื่มน้ำอัดลมในขนาดเท่าใด ?325 ml in canกระป๋องขนาด 325 มล.
1.25 liters in bottle ขวดขนาด 1.25 ลิตร
 550 ml in bottle ขวดขนาด 550 มล.$\square$ 1.45 liters in bottle ขวดขนาด 1.45 ลิตร2 liters in bottle ขวดขนาด 2.00 ลิตร
60. How much amount of carbonated soft drink do you consume per time? ในแต่ละครั้งคุณบริโภคเครื่องดื่มน้ำอัดลมปริมาณเท่าใด ?


550 ml ขวดขนาด 550 มล.
1.25 । 1.25 ลิตร
$\square 1$ I ขนาด 1 ลิตร
$\square$ 2। 2ลิตร
61. What other brands do you normally consume other than Coke, Pepsi or Est?

โดยปกติคุณบริโภคเครื่องดื่มน้ำอัดลมยี่ห้อใดนอกเหนือจาก โค๊ก, เป๊ปซี่ และ เอส ?
Sprite สไปร์ท

$\square$Fanta แฟนต้า Mountain Dew เมาเท่น ดิว
62. Why do you drink carbonated soft drinks? ทำไมคุณจึงบริโภคเครื่องดื่มน้ำอัดลม ?

$\square$
Taste รสชาติ

## $\square$ Refreshment ความสดชื่น

$\square$ Energy พลังงาน
$\square$ Passion อารมณ์
63. What influence you to drink carbonated soft drinks? อะไรที่มีอิทธิพลต่อคุณจึงบริโภคเครื่องดื่ม น้ำอัดลม ?
$\square$ Friend เพื่อน
$\square$ Family ครอบครัว
$\square$
Lifestyle วิถีการดำเนินชีวิต
$\square$ Cultural trends แนวโน้มทางวัฒนธรรม
64. Why do you prefer to drink a particular brand? ทำไมคุณจึงชื่นชอบบริโภคเครื่องดื่มน้ำอัดลมโดย เฉพาะเจาะจงในยี่ห้อ ?
Refreshing taste รสชาติสดชื่น
ดึงดูด


Attractive Promotion โปรโมชั่นน่าดึงดูด $\square$ Availability of convenient size ขนาดที่ กะทัดรัดConvenient to buy (easily available) หาซื้อง่าย $\square$ Brand Imageภาพลักษณ์ของแบรนด์
65. If you cannot find your favorite carbonated soft drink then which brand do you buy? ถ้า คุณไม่สามารถซื้อเครื่องดื่มน้ำอัดลมที่ชื่นชอบมากที่สุด คุณจะซื้อยี่ห้อใด?

66. Do you think you can identify the difference in taste among the three brands (Coke, Pepsi and Est)? คุณคิดว่า คุณสามารถแยกเอกลักษณ์ความแตกต่างในรสชาติของทั้ง 3 ยี่ห้อ โค้ก เป๊ปซี่ เอส ได้ หรือไม่ ?

67. If you order a specific soft drink brand but you get another brand instead of it, what will you do? ถ้าคุณสั่งเครื่องดื่มน้ำอัดลมยี่ห้อที่เฉพาะเจาะจง แต่คุณกลับได้ยี่ห้ออื่นมาแทนคุณจะทำ อย่างไร?
$\square$ I will ask to change it ฉันจะถามเพื่อขอเปลี่ยน I will not ask anything and will drink it. ฉันจะไม่ถามและจะดื่มเครื่องดื่มนั้น
68. What is the most effective advertising that makes you want to drink a carbonated soft drink? การ โฆษณาแบบอะไรที่มีผลกระทบอย่างมากที่ทำให้คุณต้องการดื่มเครื่องดื่มน้ำอัดลม?
 (สังคมออนไลน์ )
$\square$ Billboards ป้ายประกาศ Print advertising โฆษณาสิ่งพิมพ์
69. Which is the most attractive promotion that makes you purchase soft drink?

โปร โมชั่นอะไรที่น่าดึงดูดใจมากที่สุดที่ทำให้คุณซื้อเครื่องดื่มน้ำอัดลม ?
$\square$ Buy 1 get 1 ซื้อ 1 แถม 1 $\square$ Get more quantity in same priceได้ปริมาณมากขึ้น ในราคาเดิม
$\square$ Buy combo pack of two in less amount $\square$ Cash discount ส่วนลดเงินสด
ซื้อ 2 แพ็คใหญ่ในราคาถูกว่า

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