

# The Study of Brand Support from the Perspective of Crisis management

Kao-Shan Chen  
Business Administration  
Vanung University, Taiwan

Shih-Tse Lin  
Business Administration  
Vanung University, Taiwan

Mei-Yun Huang  
Land Administration  
Taipei City, Taiwan

**Abstract:-** After the incident of poisonous starch in Taiwan, the government immediately repaired the problem and completed the amendment of the Food Sanitation Management Law. In addition to substantially increasing the fines, it also further strengthened the current food safety risk monitoring and established an early warning mechanism. The purpose of this paper is tried to find out the effectiveness of crisis management by using design of experiment (DOE). Meanwhile, this paper is also to study the reflection by customers during different stage of crisis, such as before crisis, crisis happening and crisis recovery. The dimensions of brand relationship and reports related to food safety are accumulated to simulation the diffident stage of crisis management by using design of experiment. The result of this paper represent that among the stage of before crisis, crisis happening and crisis recovery is difference. This paper find out the most impact to customers is crisis happening as well which means most customers are affective the confidence with an enterprise by the affair of crisis, and the confidence of customers will be increased while a well treatment in the stage of crisis recovery.

**Keyword:-** Brand Relationship Quality; Crisis Management ; DOE; Brand Image.

## I. INTRODUCTION

Taiwan's food industry is the most internationally competitive project. Many international superstars or famous companies are attracted by the night market snacks and exquisite food. They are willing to promote Taiwan for their own initiative. Meanwhile, food safety issues are still a major issue that affects people's lives and health. According to statistics provided by the Department of Health and Welfare, food safety problems in recent years have shown an upward trend. Since 1979, Taiwan has suffered from "rice oil poisoning" and "poisonous wine" incidents, which has led to the rise of private consumer protection groups such as the Consumers' Education Foundation of the Republic of China, which kicked off the prelude to food safety and also hit the brand of well-known companies image.

Well-known food safety incidents, such as meat, plasticizer, black heart oil (oily copper chlorophyll, waste oil, feed oil, industrial oil). The Taiwan Consumer Protection Association has filed a group lawsuit against

consumers. However, the judicial claims for food safety hazards need to be confirmed, making it easy for the government to indulge and punish the black heart. After 2011, Taiwan once again broke a series of major food safety incidents. The large number of food safety incidents and the emergence of "black heart food" for several consecutive years have caused concern in Taiwan society and even in the countries concerned. Taiwanese people are also worried about food safety, which has a series of follow-up effects, and food safety is also related to consumers' confidence in enterprises. Especially the well-known enterprises will make the brand image and consumption that have been established for a long time because of the food safety storm. The confidence of the people is shaken, and even may collapse in the hearts of consumers, causing an irreparable situation. Therefore, in the event of a crisis in the food safety storm, how can enterprises respond to the consumer's business at the end of the food safety storm? Whether there is any change in confidence is an important factor affecting the sustainable operation of the company. Therefore, this paper will discuss whether the consumer's confidence and loyalty to the company have any concern in the crisis of the company's crisis. The change is used as a reference for the treatment of enterprises in the face of crisis.

## II. LITERATURE REVIEW

### A. Brand equity

Brand equity is part of the company's intangible assets. In the early 1980s, this concept was first applied to the American advertising industry (Barwise, 1993), and it was not until the 1980s that it was accepted by academics (Kotler, 2001). Bonner and Nelson (1985) pointed out that brand equity refers to the goodwill attached to the brand name, and the brand is also a more complex symbol for the marketer to continue a set of specific product features, benefits and services to the purchaser. Keller (1993) proposes that brand equity consists of four components: (1) Brand Loyalty: Consumers' Special Dependence on a Brand; (2) Brand Awareness: Consumers' Cognition or Memories (3) Perceived Quality: Consumer judgment of the good quality of a brand; (4) Brand Association: Anything that can be imagined of a brand or brand image. Kim, Kim and An (2003) measured the brand equity of the service industry from the perspective of customer perception, and used the hotel industry as an example to classify brand equity into four categories: (1) brand loyalty; (2) brand awareness; (3) Perceived quality; and (4) brand image. Aaker (1996) believes that there are five components of

brand equity, which is the source of value creation. They are: customer loyalty, consumer perception quality, brand reverie and brand awareness, plus five facets of market behavior measurement based on company perspective, subdivided into 10 projects. Keller (1993) believes that customer-based brand equity can enhance brand equity through pricing, access, products, and promotions. Biel (1992) believes that positive brand equity is the marketing synergy of corporate brand awareness and brand vision.

### *B. Brand Relationship*

Blackston (1993) defines brand relationships as the process by which consumers interact with brands. He pointed out that the relationship between brand and consumer can be analogized to the relationship between two people. Duncan and Moriarty (1999) suggest that when a close brand relationship is established, customer stability and customer lifetime value can be enhanced. When a consumer purchases a product, a transaction relationship arises; in this transaction relationship, the consumer spends time, money, and effort to exchange the functions, utilities, or other benefits by a certain brand product, and creates a differentiation in different transaction relationships. The value of the relationship; the value of the relationship includes the relationship of interest (the benefit derived from the product), the cost of the relationship (the cost of purchasing the product), and are subjective (Liljander and Strandvik, 1995). In addition, the social exchange theory believes that the formation of interpersonal relationships is because the benefits derived from the relationship outweigh the costs, that is, the relationships arising from economic interests; therefore, the relationship interests are regarded as important variables affecting the relationship, and the relationship interests are To "consumers and businesses in a long-term relationship, in addition to the core services, consumers receive other benefits from the business" (Gwinner, Gremler and Bitner, 1998). The establishment of brand relationship is a good way for enterprises to create brand equity, and it is to enable consumers to experience good product or service quality and enhance their satisfaction (Philip Kotler, 2001).

### *C. Brand relationship quality*

Brand relationship quality (BRQ) was proposed by Fournier (1994). She developed the 15 brand relationship patterns generated by the interaction between brand and consumer from the concept of interpersonal relationship, and believed that consumers interacted here. Brands should be seen as partners in relationship development. The brand relationship can define the interaction process of the relationship established between the customer and the brand in the process of consumption, so it can be known that in this process, the brand is not only passive to let consumers have some opinions on it, but An active role to convey certain ideas to consumers, and also to anthropomorphize the brand to have human attributes. Gifford (1997) argues that brand relationship is a viable solution. The goal of brand relationship is that consumers regard brand as a partner (brand-as-partner), and the process of brand relationship is interactive. If the brand can be used properly The concept of relationship can learn from

consumers' purchasing psychology and demand, and can obtain useful information from consumers' purchase behavior. Therefore, the concept of brand management establishing good brand relationship is to increase brand strategy performance and maintain customer loyalty. When Bengtsson (2003) commented on brand relationships, he also believed that consumers should anthropomorphize brands. The relationship between the two is like a friend in interpersonal relationships. For example, you may be just ordinary friends with some people, and others. People are close friends and have different feelings for everyone, so the relationship between them is different.

### *C. Crisis Management*

"Crisis" is "crimein" in ancient Greek. It has the meaning of Divide or Discriminate, Sift and Decide. It has the characteristics of "important key moments". "Crisis" is a threatening situation or event caused by environmental factors inside and outside the organization, which threatens the survival and value of individuals and organizations. This paper is defined as: "Crisis is caused by internal and external factors of the organization, and has immediate and serious threats to the organization." The development phase of the crisis. Fink (1986) divided the trend after the crisis into three phases, as described below:

- 1). *Incubate stage*. When the crisis is about to happen, it will reveal all kinds of clues. It is interoperable with the concept of the butterfly effect. It emphasizes the importance of squatting. Any phenomenon hides specific meaning. Small things that are inconspicuous should not be easily overlooked, otherwise they will cause more loss or damage, therefore this stage is also called the "warning period"..
- 2). *Acute stage*. When the crisis has reached the critical point, it cannot be stopped. At this time, it will erupt like a river break or a volcanic eruption, if no effective measures are taken immediately. Dealing with it will result in unpredictable and expected loss or damage.
- 3). *Recovery stage*. It means that the losses or injuries caused by the crisis have been completely solved, and the crisis is reviewed and improved, the lessons learned, and how to deal with the crisis is established, and a crisis management mechanism is established.

### *D. Experimental design*

Experimental research can be said to be the most important research method in the field of science. Especially when psychology entered the era of scientific psychology, experimental design became the mainstream method of psychological research. In fact, the experimental method is not only the main research orientation of psychology, but also the research strategy used by other subject researchers to explore the effect of a particular method or to carry out different operational processes. The experiment is a scientific attempt by researchers to find evidence of the causal relationship between human things (Cook & Campbell, 1979), which is a set of scientific objective programs of "taking action" and "observing results". (Babbie, 2004). Experimental design refers to a set

of plans for arranging subjects into experimental situations and conducting statistical analyses (Kirk, 1995).

### III. RESEARCH METHODS

#### A. Theoretical Frameworks

The study mainly adopts the experimental design method and uses the variance analysis to make hypothesis tests. The experimental design method was originally used in the study of psychology. It is a research method that manipulates a certain variable under controlled conditions to examine its influence on other variables. The experimental design method is mainly used for the verification of causality. In recent years, research on marketing has begun to explore the consumer behavior under certain control conditions by means of the mirror design method, which is to explore the causal relationship between the independent variables and the dependent variables.

Analysis of Variance (ANOVA) is a test invented by R.A. Fisher for the determination of whether there is a significant difference in the mean of two or more samples. The data of the Institute is fluctuating due to various factors. The causes of fluctuations can be divided into two categories: uncontrollable random factors, and controllable factors that affect the outcome of the research squadron.

#### B. Experimental simulation scenario

This experiment is a single-factor three-level experimental design, in which the three levels included in the crisis stage of the self-variable brand are the incubation period, the outbreak period and the recovery period. The experimental design was an independent group to avoid contamination of the experimental results caused by repetition and fatigue. Therefore, “Super Duck pear milk tea”, which is well known company among consumers in Taiwan, was selected as the experimental object. In order to reduce the shortcomings of the low externality of the experimental method, the experimental design selected the brand crisis of “Super Duck.” in the plasticizer storm, and in order to obtain better experimental results, some details were slightly modified during the description of the situation. At the same time, in order to eliminate the tester's effectiveness in destroying the experimental operation due to the well-known food safety storm incident, the question “Do you know the food safety incident of “Super Duck pear milk tea” was designed in the questionnaire, and the subjects who are familiar with the incident were deleted. The context of the evolution of the brand crisis is described in the following table:

Brand crisis evolution stage	Situational simulation description
<i>Incubate stage</i>	At the end of May 2018, Taiwan’s New Taipei City Councilor Qiu Yuting received a report from the public with a screenshot of the line dialogue. He said that a friend was working in the Super Duck store. He had to cook powder and other drinks and try it because of gastroenteritis. Measles, reflected to the boss, the boss said that it is a matter of personal physique. Later, his friend inadvertently discovered that many of the raw materials were expired, and some of the powders were even moldy, but the boss only picked out the powdery molds that had grown mold, and the other ones sold them.
<i>Acute stage</i>	The inspectors of the New Taipei City Health Bureau went to the four chain stores on May 28, 2018, and found that each store had food safety disposal sites or employees who did not have regular health check-ups, etc., in violation of the environmental sanitation regulations of the Food Safety Law. There are three stores have expired "Super Q Caramel Pearl Powder", the other store has other raw materials such as expired milk, and the "Red Beans and Waters" of the Forest Store has expired for more than 8 months. The store has sealed and destroyed a total of 112.33 kg of 6 expired materials. The head of the Food and Drug Administration Department of the New Taipei City Health Bureau said that the four stores were all franchised stores. Although the operators all said that the expired products were not discarded, some of the raw materials were opened and used. It is a word of deduction. Because the "Super Duck" head office was in central Taiwan, the audit found that the New Taipei City franchise stores had expired raw materials, and immediately notified the Changhua County Health Bureau for inspection, and there was no expired raw materials. Therefore, the research should be concerned with the preservation and use of raw materials in individual franchisees. The section chief said that the use of expired raw materials in the three franchise stores will be fined between 60,000 and 200 million NT dollars in violation of the Food Safety Management Law. As for the environmental sanitation problems of the

	four stores, the triple-check, two stores have passed the test. The other store has not been opened after two re-examinations. If the re-inspection has not passed, it can be fined between 60,000 and 200 million NT dollars in violation of the Food Safety Management Law.
<i>Recovery stage</i>	After the 5/29 incident was disclosed, Super Duck could completely destroy the unqualified products. 5/30 Issue the first statement, explain the truth to the public and apologize. 5/31 Issue a second statement and apologize again to the public. And decided to donate 1 million NT dollars to consumers related public welfare groups. 6/01 Super Duck announces a 10% discount on all drinks starting from 6/12. 6/02 Super Duck took the initiative to send all the drinks and issued a statement. The Super Duck's full range of drinks met the food hygiene regulations, and the inspection report of all drinks was published on the official website.

Table 1:- Situational simulation of the evolution stage of the brand crisis

**C. Research hypothesis**

Based on the above scenario simulation, the following assumptions are made:

H<sub>10</sub>: There is no significant difference in brand relationship and brand image during the crisis incubation period

H<sub>1a</sub>: There is a significant difference between the brand relationship and the brand image during the crisis incubation period.

H<sub>20</sub>: There is no significant difference in brand relationship and brand image during the crisis.

H<sub>2a</sub>: There is a significant difference in brand relationships and brand image during the crisis.

H<sub>30</sub>: There is no significant difference in brand relationship and brand image during the crisis recovery period.

H<sub>3a</sub>: There is a significant difference in brand relationships and brand image during the crisis resolution period.

H<sub>40</sub>: There is no significant difference in brand relationship and brand image between crisis incubation period and crisis period.

H<sub>4a</sub>: There is a significant difference in brand relationships and brand image between crisis incubation period and crisis period.

H<sub>50</sub>: There is no significant difference in brand relationship and brand image between the crisis period and the crisis recovery period.

H<sub>5a</sub>: There is a significant difference in brand relationships and brand image between crisis period and crisis recovery period.

H<sub>60</sub>: There is no significant difference in brand relationship and brand image between crisis incubation period and crisis recovery period.

H<sub>6a</sub>: There is a significant difference in brand relationships and brand image between crisis incubation period and crisis recovery period.

**IV. RESEARCH RESULTS**

*A. Sample data analysis*

This study adopts a random sample survey. A total of 400 questionnaires were sent out, 385 questionnaires were collected, and the recovery rate was 96.3%. 378 valid questionnaires, the effective rate was 98.2. %. The valid sample structure of this study is described in the following table:

Classification criteria	Feature distribution
<i>gender</i>	49.8% of male and 50.2% of female
<i>age</i>	21% under the age of 20, 43.8% from 21 to 30, 14.2% from 31 to 40, 10.3% from 41 to 50, and 10.7% from over the age of 51.
<i>marriage</i>	Unmarried accounted for 64.8% and married accounted for 35.2%
<i>Career</i>	Students accounted for 24.7%, industry and commerce accounted for 15.8%, manufacturing accounted for 14.5%, military and public education accounted for 5.7%, service industry accounted for 33.1%, others accounted for 6.2%
<i>monthly income</i>	31.7% below 20,000 NT dollars, 44.8% below 20,000~40,000 NT dollars, 23.5% above 40,000 NT dollars

Table 2:- Descriptive statistics

*B. Reliability Analysis*

Nunnally (1978) considered Cronbach's  $\alpha$  greater than 0.7 to be an acceptable standard. Zhou Wenxian (Min 93) pointed out that Cronbach's  $\alpha$  has a minimum acceptable range of 0.5 to 0.6, and Cronbach's  $\alpha$  value judges the criterion of reliability:  $\alpha < 0.35$  for low confidence;  $0.35 < \alpha < 0.7$  for medium confidence;  $\alpha > 0.7$  On behalf of high confidence, in practice,  $\alpha \geq 0.6$ , you can declare the reliability of the questionnaire subject is acceptable. The results of the reliability analysis of each facet factor in this study are shown in the table below. It is known from the table that the Cronbach's  $\alpha$  value of all factor facets is higher than 0.6, which is an acceptable range. Therefore, the reliability of the facet of this study has reached a reasonable range.

Perspectives	Cronbach's $\alpha$ value	test result
<i>Brand commitment and brand relevance</i>	0.967	High reliability
<i>Brand ownership and brand attention</i>	0.961	High reliability
<i>Brand familiarity and brand understanding</i>	0.946	High reliability
<i>Brand trust and brand respect</i>	0.940	High reliability

Table 3:- Reliability Analysis

C. Validity analysis

Whether the correlation matrix is factored or not can be judged from the Kaiser-Meyer-Olkin measure proposed by Kaiser and Rice (1974). The closer the KMO value is to 1, the better the KMO value of this study is.

Perspectives	Validity	Bartlett's spherical test	Test result
<i>Brand commitment and brand relevance</i>	0.967	4007.363	High validity
<i>Brand ownership and brand attention</i>	0.946	395.840	High validity
<i>Brand familiarity and brand understanding</i>	0.940	330.068	High validity
<i>Brand trust and brand respect</i>	0.941	631.425	High validity

Table 4:- KMO and Bartlett test table

D. Results

According to the results of the research hypothesis test, there is no significant difference in brand respect and trust between gender, marriage and age in the brand relationship and brand image of  $H_{10}$  during crisis incubation period. For the  $H_{1a}$ , crisis incubation period brand relationship and brand image in age for brand commitment and relevance, brand ownership and attention and brand familiarity and understanding; career commitment and related, brand ownership and attention, brand familiarity and understanding, brand Respect and trust; monthly income for brand commitment and relevance, brand ownership and attention and brand familiarity and understanding, brand respect and trust; familiarity for brand commitment and relevance, brand ownership and attention and brand familiarity and understanding, brand Respect and trust.

There was no significant difference in brand identity and attention, brand familiarity and understanding between the brand relationship and brand image of the  $H_{20}$ . For the  $H_{2a}$ , brand relationship and brand image in the crisis period, brand commitment and related, brand respect and trust; career commitment and related, brand ownership and

attention, brand familiarity and understanding, brand respect and trust; monthly income for Brand commitment and relevance, brand ownership and attention, brand familiarity and understanding, brand respect and trust; familiarity is significantly different for brand commitment and relevance, brand ownership and attention, brand familiarity and understanding, brand respect and trust.

There is no significant difference in gender, marriage, age and occupation in the brand relationship and brand image of  $H_{30}$  during crisis recovery period. For the  $H_{3a}$ , the brand relationship and brand image of crisis recovery period have significant differences in monthly income and familiarity.

There is no significant difference in brand relationship and relevance, brand familiarity and understanding, brand trust and respect in crisis incubation period and crisis outbreak period of  $H_{40}$ ; brand relationship between crisis incubation period and crisis period and brand image in brand image, there is a significant difference between brand image and brand ownership and attention of  $H_{4a}$ .

Brand relationship and brand image of the  $H_{5a}$  in crisis period and crisis recovery period have significant differences in brand relationship and brand image, brand commitment and relevance, brand familiarity and understanding, and brand trust and respect.

V. CONCLUSIONS

According to the analysis of the questionnaire data, the results are summarized as follows:

First, the analysis of the variance of the brand relationship quality at different stages shows that the quality of the brand relationship in the three stages (incubate, acute, and recovery) is significantly different ( $F=11.82, p=0.000 < 0.05$ ). The average number of crisis resolution periods (3.365) is significantly greater than the crisis incubation period (3.277) and the crisis outbreak period (3.251). It shows that in the crisis resolution period, if the enterprise is properly handled after the crisis, it will turn the crisis into a turning point and let the enterprise Enter another business event.

Second, the brand relationship quality during the crisis period is the lowest, and the quality of the brand relationship during the recovery period is the highest:

- 1). The brand crisis period is the lowest quality of brand relationship, in which brand commitment and relevance are greatly reduced. This is because when the brand crisis breaks out, the crisis situation is further aggravated, and the crisis perceived by consumers is more serious. The "effect of negative message" formed by the media after the in-depth report made consumers pay more attention to the brand crisis, and the pressure from society and public opinion also made consumers reluctant to try to buy.
- 2). The brand crisis recovery period is the stage with the highest quality of brand relationship in the process of crisis evolution. The brand commitment and relevance and brand

ownership and attention are greatly improved, indicating that consumers' trust in the brand is gradually restored, and they are willing to believe. Brand information and brand future development. When the brand crisis occurred, the crisis situation was well controlled due to the proper handling of the corporate crisis. Therefore, the negative news about the brand during the crisis broke out, and the pressure of public opinion felt by consumers also decreased. People also gradually regain confidence in the brand due to the relationship between the attitude of the company and time.

Third, according to the relationship between brand commitment and relevance, brand ownership and attention, brand familiarity and understanding, brand trust and respect, we can see that in the crisis incubation period, crisis outbreak period, and crisis recovery period. After the comparison between the two, there are significant differences, as detailed below:

1). *When the crisis incubation period:*

- a) Different ages, different occupations, different monthly incomes and different familiarities have significant differences in brand commitment and relevance.
- b) Different ages, different occupations, different monthly incomes and different familiarities have significant differences in brand ownership and attention.
- c) Different ages, different occupations, different monthly incomes and different familiarities have significant differences in brand familiarity and understanding.
- d) Different occupations, different monthly incomes and different levels of familiarity have significant differences in brand trust and respect.

2). *The crisis broke out:*

- a) Different age groups, different occupations, different monthly incomes and different familiarities have significant differences in product commitment and relevance;
- b) Different occupations, different monthly incomes and different familiarities have significant differences in brand ownership and attention.
- c) Different occupations, different monthly incomes and different familiarities have significant differences in brand familiarity and understanding.
- d) Different age groups, different occupations, different monthly incomes and different familiarities have significant differences in brand trust and respect.

3). *Crisis recovery period*

- a) Different monthly incomes and different familiarities have significant differences in brand commitment and correlation
- b) Different monthly incomes and different familiarities have significant differences in brand ownership and attention.
- c) Different monthly incomes and different familiarities have significant differences in brand familiarity and understanding.
- d) Different monthly incomes and different familiarities have significant differences in brand trust and respect.

## REFERENCES

- [1]. Aaker, D. A., "Managing Brand Equity: Capitalizing on the Value of a Brand Name," New York: The Free Press, 1991.
- [2]. Barwise, P., "Brand equity: Snark or boojum," International Journal of Research in Marketing, Vol.10, pp. 93-104, 1993.
- [3]. Babbie, E., "Laud Humphreys and research ethics," International Journal of Sociology and Social Policy, Vol.24, No. 3/4/5, pp. 12-19, 2004.
- [4]. Bengtsson A., "Towards a critique of brand relationships." Advances in Consumer Research, Vol.30, No.1, pp. 154-158, 2003.
- [5]. Biel, A., "How brand image drives brand equity", Journal of Advertising Research, Vol.32, pp. 6-12, 1992.
- [6]. Blackston, M., "Beyond Brand Personality: Building Brand Relationships." in Brand Equity and Advertising: Advertising's Role in Building Strong Brands, ed. David Aaker and Alexander Biel. Hillsdale, New Jersey: Erlbaum, pp. 113-124, 1993.
- [7]. Cook, T. D. and Campbell, D. T., "Quasi-Experimentation: Design & Analysis Issues for Field Settings". Boston: Houghton Mifflin Company, pp. 37- 94. 1979.
- [8]. Dobni, D. and V. A. Zeithaml., "In Search of Brand Image: A Foundation analysis." In Advances in Consumer Research, Vol. 17 No.1 edited by M. E. Goldberg, G. Gorn, and R. Pollay, UT: Association for Consumer Research, pp. 110-119, 1990.
- [9]. Dodds, W. B., K. B. Monroe and D. Grewal., "Effects of Price, Brand, and Store Information on Buyers' Product Evaluation." Journal of Marketing Research, Vol.28, August, pp. 307-319, 1994.
- [10]. Duncan, T. and S. Moriarty., "Brand Relationships Key to Agency of the Future." Advertising Age, Vol.18, October, pp. 44-51, 1999.
- [11]. Fink, Steven., "Crisis Management: Planning for the Inevitable.," NY: American Management Association, 1986.
- [12]. Fournier, S., "A consumer-brand relationship framework for strategic brand management," Ph.D. Dissertation, FL: University of Florida, 1994.
- [13]. Fournier, S., "Consumers and Their Brands: Developing Relationship Theory in Consumer Research." Journal of Consumer Research, Vol.22, No.3, pp.327-343, 1998.
- [14]. Gifford, D., Jr., Brand management: Moving beyond loyalty. Harvard Business Review, Vol. 75, No. 2, pp. 9-1, 1997.
- [15]. Gwinner, K. P., D. D. Gremler, and M. J. Bitner., "Relational Benefits in Services Industries: The Customer's Perspective." Journal of the Academy of Marketing Science, Vol.26, No. Spring, pp.101-114, 1998.
- [16]. Garretson, J. A. and K. E. Clow., "The Influence of Coupon Face Value on Service Quality Expectations, Risk Perceptions and Purchase Intentions in the Dental Industry." The Journal of Services Marketing, Vol.13, No.1, pp. 59-72, 1999.

- [17]. Keller, K. L., "Conceptualizing, measuring, managing customer-based brand equity," *Journal of Marketing*, Vol.57, pp. 1-22, 1993.
- [18]. Keller, K. L., "Building Customer-based Brand Equity." *Marketing Management*, Vol.10, No. July, pp.14-19, 2001.
- [19]. Kirk, R. E. "Experimental design: Procedures for the behavioral sciences (3rd ed.)". Pacific Grove, CA: Brooks, 1995.
- [20]. Patrick Barwise., "Brand equity: Snark or boojum?". *International Journal of Research in Marketing*, Volume 10, Issue 1, March 1993, pp. 93-104.
- [21]. Philip Kotler, Kevin Lane Keller, Ang Swee Hoon, Leong Siew Meng, Tan Chin Tiong., *Marketing Management: An Asian Perspective -5th Edition*. McGraw•Hill Publishing, New York, 2001.
- [22]. Liljander and Strandvik, "The Nature of Customer Relationships in Services." *Advances in Services Marketing and Management*, Volume 4, Pages xxiii-xxiv, 1995.
- [23]. Randall G., *Do Your Own Market Research*, 1st Edition, California: Kogan Page Ltd, 1997.
- [24]. Richardson, P. S., A. S. Dick, and A. K. Jain, "Extrinsic and Extrinsic Cue Effect on Perceptionsof Store Brand Quality." *Journal of Marketing Research*, Vol.58, No. 4, pp. 28-36, 1994.
- [25]. Zeithaml, V. A., "Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence." *Journal of Marketing*, Vol.52, pp. 2-22, 1988.