

Brand Image and Service Quality on Purchase Intentions: Evidence from the Chain Cram Schools in Taiwan

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ABSTRACT

The purpose of this study is to investigate the influence of brand image and service quality on consumer purchase intention from the perspective of the Taiwan cram school industry. The research involved a questionnaire survey of parent consumers of primary school pupils attending cram schools. A 37-item, five-point Likert scale questionnaire was used to collect the data. From the total sample size, 430 responses representing 84.15 percent were found useable for analysis. The data were then analyzed using the SPSS software for reliability analysis, descriptive statistics, factor analysis, independent sample t-test, One Way Analysis of Variance, Pearson product-moment correlation, and regression analysis.

The results indicate that both brand image and service quality are significantly positively correlated with purchase intention, and that service quality as compared to the brand image is more positively related to purchase intention. Additionally, this study finds evidence that both brand image and service quality are significantly positively predictive of purchase intention.

Keywords: Brand Image; Service Quality; Purchase Intention; Cram Schools

1. Introduction

The Taiwanese educational system encompasses a huge range of after-school supplementary classes or “cram schools.” There are two main categories of cram schools: academic cram schools and those offering non-academic subjects. Currently, a significant number of Taiwanese students have the need to attend academic cram schools to improve their skills. Attendance at cram schools is an experience that the majority of Taiwanese have while growing up (Liu, 2012).

Brand image is the consumer’s first impression of the brand and is typically easily identified by consumers. Wijaya (2013) asserts that brand image has a direct positive effect on the corporate reputation that could later become a guideline for the consumer to try or use a product or service. The brand image creates associations that lead to positive attitudes and feelings that are transferred to the business (Keller & Lehmann, 2003; Raggio & Leone, 2007). Liao, Tang, and Chi (2017) claim that service quality plays a critical role in the success of a business, which is the most powerful weapon for competition. The key to the success of a business in a consumer-oriented time is to provide services or products that meet customers’ needs. Among the many factors affecting purchase intention, the consumer’s perception regarding brand image and service quality is inferred to contribute to purchasing intention (Engel, Blackwell, & Miniard, 1993).

As births are rapidly decreasing while the number of cram schools is increasing, the competition among cram schools is becoming fiercer by the day. Thus, the issues of how to satisfy both needs of the student as well as the parent, satisfactory brand image, thoughtful service quality, and consumer purchase intention, are widely discussed and necessary for the survival and sustainability of cram schools and tutoring services.

Through literature review and survey questionnaires, the objective of this study is to investigate the impact of brand image and service quality on consumer purchase intention from the perspective of the chain cram schools in Taiwan. The research involved a questionnaire survey of 430 respondents who are parent consumers of primary

school pupils attending cram schools. In order to narrow the scope of research, this study focuses primarily on the followings:

1. Investigating parent consumers' perception of the quality of cram school services.
2. Investigating parent consumers' perception of the brand image of cram schools.
3. Investigating whether service quality is associated with the brand image of cram schools.
4. Investigating whether the service quality of cram schools is associated with parent consumers' purchase intention.
5. Investigating whether the brand image of cram schools is associated with parent consumers' purchase intention.
6. Summarizing the results of the research, putting forward conclusions and recommendations to serve as references for cram schools to improve their business strategies.

The remainder of this paper is divided into four sections. Section 2 provides a brief literature review. Section 3 lays out the sampling procedure and data and describes research methods. Section 4 presents the empirical results. Section 5 summarizes the implications of results and then offers concluding comments.

2. Literature Review

2.1 Brand Image

According to the definition by American Marketing Association (AMA), a brand is "a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors" (Kotler, 2000: 404). Brand image is the consumer's first impression of the brand and is typically easily identified by consumers. Brand image plays an important role in the development of a brand because of the brand image regarding the reputation and credibility of the brand that could later become a guideline for the consumer to try or use a product or service (Wijaya, 2013). The brand image of a company serves to allow the company's products and services to be easily recognizable. In addition, the brand image of a company typically implicates the promises and guarantees of the company's products and services (Brexendorf & Kernstock, 2007). Therefore, most companies strive to establish a clear brand image and to ensure that interaction between the brand and the consumers are strengthened, which ultimately influences the consumers' purchase intention.

Park, Jaworski, and MacInnis (1986) define a brand's concept to refer to the type of needs the brand satisfies and describe three types of brand concepts:

1. Functional: Emphasis on the functional performance of the brand with a focus on assisting consumers to solve problems encountered during the process as well as consumer satisfaction with the process.
2. Symbolic: Refers to a brand that meets the underlying needs of the consumers such as the enhancement of self-worth, group integration, self-identification, etc. This aspect of brand image mainly gives consumers a sense of pleasure and satisfaction.
3. Experiential: Consumers get a sense of fun or stimulation from the brand's products or services.

Keller and Lehmann (2003) define brand equity as a model of associative network memory which includes brand awareness and brand image. And brand image helps develop and convey the product's character in a unique manner different from its competitor's image. The functions of brand image are as follows (Raggio & Leone, 2007):

1. The brand image can help consumers regain and transfer information.
2. The brand image provides a benchmark for product differentiation and positioning.
3. The brand image represents product attributes and provides reasons for customers to purchase and use the brand.
4. The brand image creatives associations which generate positive attitudes and feelings for the brand.
5. The brand image provides insight into new products and services. Through the brand's message, consumers are compelled to purchase new products from the brand.

2.2 Service Quality

The service quality is defined as an attitude, which is a comparison before and after receiving service (Parasurman, Zeithamal, & Berry, 1988). Lewis and Booms (1983) deem service quality to be the coincidence between service provided and expected and both should be consistent. Liao, Tang, and Chi (2017) describe that

service quality is based on viewpoints of customers rendering to an evaluation consumer made after comparing service they expected and received and claim that service quality plays a critical role in the success of a business.

There are four unique characteristics that are first discussed in the early services marketing literature (refer to Regan, 1963; Rathmell, 1966; Shostack, 1977, and Zeithaml, Parasuraman & Berry, 1985 for more details) and are generally summarized as intangibility, heterogeneity, inseparability, and perishability. According to Smith (1990), the four characteristics of services are (1) Intangibility: the products and services sold are intangible and are instead, interactions between the services and the consumer. Consumers, therefore, cannot access the services before purchasing, which makes it difficult to assess the value and content of the services and products provided. (2) Heterogeneity: most services are provided by staff. With human factors in consideration, it is difficult to maintain the services provided at a consistent level. Even if the service is provided by the same person, the service will be different due to different circumstances. (3) Inseparability: during the delivery of the service, the provider and the consumer must be present at the same time. This makes it difficult or impossible to offer the services beforehand or later on. (4) Perishability: providers cannot preserve the services and products offered, and consumers have difficulty purchasing additional services to cater to unexpected needs.

2.3 Purchase Intention

In marketing-related literature, purchase intention or referring to willingness to buy is normally defined as the possibility that the consumer will purchase a specific service or product (Sam, Fazli, & Tahir, 2009; Zaichkowsky, 2011). Purchase intention is also being defined as a conscious plan made by the consumer to make an effort to purchase a brand (Spears & Singh, 2004).

Factors affecting intentions to purchase fall largely into four categories (So, Wong, & Sculli, 2005): (1) Source of the product information: the information of different products and services comes from different sources, which causes consumers to have different preferences for products. This ultimately affects consumers' purchase intentions. (2) Price: the price is an important indicator of service quality and value for consumers. Consumers use price as the basis for measuring whether the quality of the product is proportional to the money they spent on the service. (3) Consumer's familiarity with the products and services. (4) Product attributes and the perception of the consumer: In simple terms, the more the consumer is aware of the product or service, the more willing they are to buy the product or service. Among the many factors that affect purchase intention, the consumer's desire to purchase the product serves as a significant factor of purchase intention. In addition to desire, the consumer's perception, emotion, and behavior also contribute to purchase intention (Engel, Blackwell, & Miniard, 1993). Therefore, consumers with different beliefs will have significant differences in purchase intention.

3. Methodology

3.1 Research Framework

The research framework is as shown in Figure 3.1

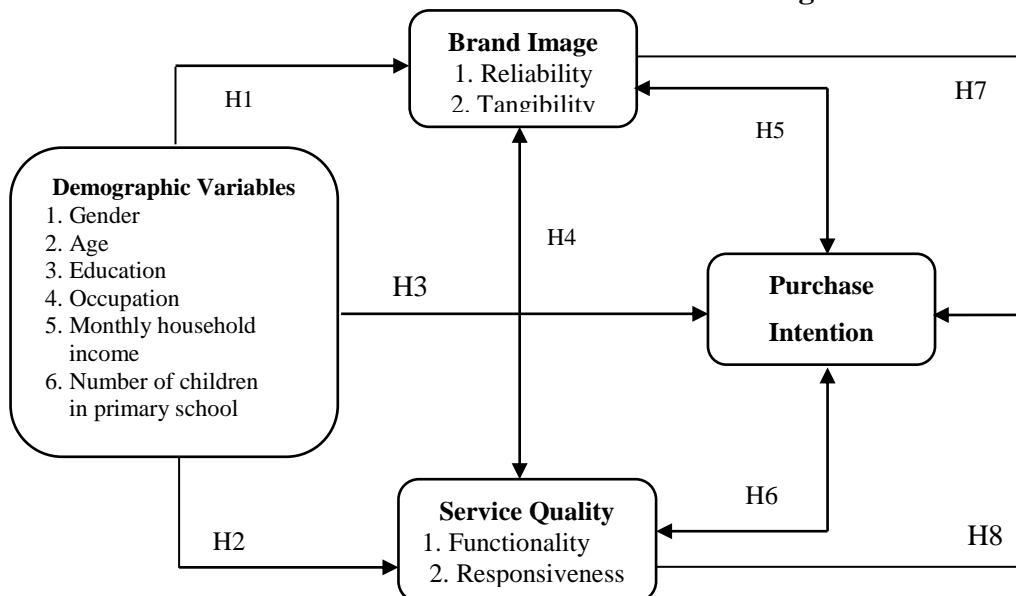


Figure 3.1 Research Framework

3.2 Hypotheses

Given the research background and purpose, the research hypotheses are as follows:

- H1: Parent consumers of different demographic variables show significant differences in brand image.
- H2: Parent consumers of different demographic variables show significant differences in service quality.
- H3: Parent consumers of different demographic variables show significant differences in purchase intention.
- H4: Brand image and service quality are positively correlated.
- H5: Brand image and purchase intention are positively correlated.
- H6: Service quality and purchase intention are positively correlated.
- H7: Brand image has positive predictive power for purchase intention.
- H8: Service quality has positive predictive power for purchase intention.

3.3 Data Collection and Analysis Methods

The literature review method as well as the questionnaire survey method were used to conduct research on the parents of students in the chain cram schools in Yunlin County, Taiwan. The survey conducted in January/February 2020 used a 37-item, five-point Likert scale questionnaire for data collection. A total of 550 questionnaires were distributed and among those 511 were returned. Excluding questionnaires that were left incomplete, the total number of valid questionnaires was 430, resulting in a recovery rate of 84.15%. The data were then analyzed using the SPSS software for reliability analysis, descriptive statistics, factor analysis, independent sample t-test, One Way Analysis of Variance, Pearson product-moment correlation, and regression analysis.

4. Research Results

4.1 Descriptive Statistics

The results of this study show that the top three out of the 15 question items of brand image in regard to their averages are: "The teaching quality of the cram school is excellent (mean = 4.55, SD = 0.600)," "The teacher quality of the cram school is excellent (mean = 4.55, SD = 0.555)," and "The quality of the cram school services are satisfactory (mean = 4.53, SD = 0.585)." The lowest three question items of brand image in regard to their averages are: "The cram school often hands out advertisement such as pens and school bags with identification (mean = 3.53, SD = 0.894)," "The cram school often provides detailed propaganda materials to promote its education philosophy (mean = 3.77, SD = 0.831)," and "The cram schools is a nationally-known brand (mean = 3.89, SD = 0.878)."

The results of this study show that the top three out of the 15 question items of service quality in regard to their averages are: "The tutoring services and teaching style are conducive to student learning (mean = 4.54, SD = 0.569)," "The cram school emphasizes character growth in the students (mean = 4.50, SD = 0.668)," and "The cram school provides a safe and comfortable learning environment for students (mean = 4.47, SD = 0.607)." The lowest three question items of service quality in regard to their averages are: "The cram school corrects student misconduct with appropriate punishments (mean = 4.00, SD = 0.805)," "The cram school often organizes inter- and intra-school competitions to enhance learning experience (mean = 4.02, SD = 0.824)," and "The cram schools regularly hold parent-teacher conferences (mean = 4.07, SD = 0.816)."

The highest average of the 7 question items of purchase intention is "I will be happy to share with others my experience with the tutoring services provided (mean = 4.34, SD = 0.663)," whereas the lowest average of the items is "I will let my children participate in all of the new courses offered by the cram school (mean = 3.99, SD = 0.790)."

4.2 Results of Difference Analysis

4.2.1 Difference in Perceptions of Brand Image by Parent Consumers of Different Demographic Variables

Table 4.1 summarizes the analysis results of the hypotheses test of brand image for parent consumers of different demographic variables.

Table 4.1 Results of Hypotheses Test of Brand Image for Parent Consumers of Different Demographic Variables

Research Hypothesis	Results
H1-1: Parent consumers of different genders show significant differences in brand image	Partially Supported
H1-2: Parent consumers of different ages show significant differences in brand image.	Not Supported
H1-3: Parent consumers of different education show significant differences in brand image.	Partially Supported
H1-4: Parent consumers of different occupations show significant differences in brand image.	Partially Supported
H1-5: Parent consumers of different average monthly household incomes show significant differences in brand image.	Not Supported
H1-6: Parent consumers with different numbers of children in primary school show significant differences in brand image.	Partially Supported

4.2.2 Difference in Perceptions of Service Quality by Parent Consumers of Different Demographic Variables

Table 4.2 summarizes the analysis results of hypotheses test of service quality for parent consumers of different demographic variables.

Table 4.2: Results of Hypotheses Test of Service Quality for Parent Consumers of Different Demographic Variables

Research Hypothesis	Results
H2-1: Parent consumers of different genders show significant differences in service quality.	Partially Supported
H2-2: Parent consumers of different ages show significant differences in service quality.	Partially Supported
H2-3: Parent consumers of different education show significant differences in service quality.	Partially Supported
H2-4: Parent consumers of different occupation show significant differences in service quality.	Not Supported
H2-5: Parent consumers of different average monthly household incomes show significant differences in service quality.	Partially Supported
H2-6: Parent consumers with different numbers of children in primary school show significant differences in service quality.	Not Supported

4.2.3 Difference in Purchase Intention by Parent Consumers of Different Demographic Variables

Table 4.3 summarizes the analysis results of hypotheses test of purchase intention for parent consumers of different demographic variables. Parent consumers of different gender and different average monthly household incomes show significant differences in purchase intentions.

Table 4.3 Results of Hypotheses Test of Purchase Intention for Parent Consumers of Different Demographic Variables

Research Hypothesis	Results
H3-1: Parent consumers of different genders show significant differences in purchase intention.	Supported
H3-2: Parent consumers of different ages show significant differences in purchase intention.	Not Supported
H3-3: Parent consumers of different education show significant differences in purchase intention.	Not Supported
H3-4: Parent consumers of different occupations show significant differences in purchase intention.	Not Supported
H3-5: Parent consumers of different average monthly household incomes show significant differences in purchase intention.	Supported
H3-6: Parent consumers with different numbers of children in primary school show significant differences in purchase intention.	Not Supported

4.3 Results of Correlation Analysis

The results of this study found that the independent variables underlying this study are all correlated to the dependent variables. From the results of the Pearson product-moment correlations (refer to Table 4.4), this study reveals that (a) all the factors of brand image and service quality have a significantly positive correlation with each other (within a moderate, $r = 0.416$, and high $r = 0.754$, correlation), (b) all the factors of brand image and purchase intention have a positive correlation with each other (moderate, $r = 0.549-0.584$, correlation), and (c) all the factors of service quality and purchase intention have a positive correlation with each other (moderate, $r = 0.660-0.705$,

correlation). Together, these statistics support the notion that both brand image and service quality are positively correlated with purchase intention, and that service quality as compared to the brand image is more positively related to purchase intention. As such, Hypotheses 4, 5, and 6 were supported in these data. Table 4.5 shows a summary results of the correlation analysis among brand image, service quality, and purchase intention.

Table 4.4 Correlations between brand image, service quality, and purchase intention

	1	2	3	4	5
1. Reliability					
2. Tangibility	0.487**				
3. Functionality	0.727**	0.628**			
4. Responsiveness	0.754**	0.416**	0.739**		
5. Purchase intention	0.584**	0.549**	0.705**	0.660**	

Note: **p<0.01

Table 4.5 Summary of Results of Correlation Analysis

Research Hypotheses	Results
H4: Brand image and service quality are positively correlated.	Supported
H5: Brand image and purchase intention are positively correlated.	Supported
H6: Service quality and purchase intention are positively correlated.	Supported

4.4 Results of Regression Analysis of Brand Image, Service Quality, and Purchase Intention

The regression results summary is shown in Tables 4.6 and 4.7. The regression analysis gives a more robust result than that obtained from the correlation run. All the regression coefficients were positive, indicating that parent consumers had a higher level of purchase intention when they perceived better brand image as well as service quality. Additionally, two brand image factors Reliability (B= 0.482, p<0 .00) and Tangibility (B= 0.310, p< 0.00) and two service quality factors Functionality (B= 0.511, p<0 .00) and Responsiveness (B= 0.348, p<0 .00) were statistically significant, suggesting that these four factors may predict significantly purchase intention (supporting H7: Brand image has a positive predictive power on purchase intention and H8: Service quality has a positive predictive power on purchase intention). These results indicate that the independent variables have a significant impact on the dependent variables.

Table 4.6 Results of analyzing the effect of brand image on purchase intention

Independent variables	B (p value)
Constant	0.893 (0.000)
Reliability	0.482 (0.000)
Tangibility	0.310 (0.000)
Summary of estimates of regression coefficients	
R	0.658
R ²	0.433
adjusted R ²	0.430
VIF statistic	1.851
F value (p value)	163.047 (0.000)

Purchase intention = 0.893 + 0.482 Reliability + 0.310 Tangibility

Table 4.7 Results of analyzing the effect of service quality on purchase intention

Independent variables	B (p value)
Constant	0.482 (0.005)
Functionality	0.511 (0.000)
Responsiveness	0.348 (0.000)
Summary of estimates of regression coefficients	
R	0.735
R ²	0.540
adjusted R ²	0.538
VIF statistic	1.900
F value (p value)	250.484 (0.000)

Purchase intention = 0.482 + 0.511 Functionality + 0.348 Responsiveness

5. Conclusions and Recommendations

This study aims to investigate the relationships among brand image, service quality, and purchase intention in the Taiwan cram school context. In this study, the evidence is provided to indicate that consumers of a different gender or with different average monthly incomes show significant differences in purchase intentions. Moreover, the results also show that the highest two averages of the 15 question items of brand image are “The teaching quality of the cram school is excellent” and “The teacher quality of the cram school is excellent.” And the lowest two question items of brand image in regard to their averages are “The cram school often hands out advertisements such as pens and school bags with identification” and “The cram school often provides detailed propaganda materials to promote its educational philosophy.” Together, these lead to the conclusion that the perception of the brand image is largely influenced by the teaching quality and teacher quality and that parent consumers do not choose which cram school to send their children to through advertisement and publicity distributed or from the popularity of their brand.

In addition, the highest two average of the 15 question items of service quality is “The tutoring services and teaching style are conducive to student learning” and “The cram school emphasizes character growth in the students,” while the lowest two question item of service quality are “The cram school corrects student misconduct with appropriate punishments” and “The cram school often organizes inter- and intra-school competitions to enhance the learning experience.” These results reveal that the satisfaction of parent consumers regarding the service quality the cram schools provide is primarily influenced by whether the providers foster an effective and stable learning environment. The findings also show that disciplinary actions and various joint competitions should be improved to meet the expectations of parent consumers.

Finally, consistent with previous literature, the results in this study indicate that the two variables, brand image, and service quality, are significantly positively correlated with purchase intention, and that service quality as compared to the brand image is more positively related to purchase intention. There is also some evidence that both brand image and service quality have a significant positive impact on purchase intention.

References

- Brexendorf, T. O. & Kernstock, J. (2007). Corporate behavior vs. brand behavior: Towards an integrated view?. *Journal of Brand Management*, 15(1), 32-40.
- Engel, J., Blackwell, R. D., & Miniard, P.W. (1993). *Consumer Behavior*. 7th ed., Dryden.
- Keller, K. L. & Lehmann, D. R. (2003). How Do Brands Create Value? *Marketing Management*, 12(3), 26-31.
- Kotler, P. (2000). *Marketing Management*. New Jersey: Prentice Hall.
- Liao, W. N., Tang, T. C., & Chi, L.C. (2017). A study of applying quality function deployment & service quality model to service quality of credit department of farmers' association – A case study in Taiwan. *International Research Journal of Applied Finance*, 8(2), 47-69.
- Liu, G. (2012). Does cram schooling matter? Who goes to cram schools? Evidence from Taiwan. *International Journal of Educational Development*, 32(1), 46-52.
- Parasurman, A., Berry, L. L., & Zeithml, V. A. (1988), SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40.
- Park, C. W., Jaworski, B. J. & MacInnis, D. J. (1986). Strategic brand concept-Image management. *Journal of Marketing*, 50, 135-145.
- Raggio, R. D. & Leone, R. P. (2007). The theoretical separation of brand equity and brand value: Managerial implications for strategic planning. *Journal of Brand Management*, 14 (5), 380-395.
- Rathmell, J. M. (1966). What is meant by services?, *Journal of Marketing*, 30, 32-36.
- Regan, W. J. (1963). The service revolution. *Journal of Marketing*, 47, 57-62.
- Sam, M., Fazli, M., & Tahir, M. N. H. (2009). Website quality and consumer online purchase intention of air ticket. *International Journal of Basic & Applied Sciences*, 9(10), 20-25.
- Shostack, G. (1977). Breaking free from product marketing. *Journal of Marketing*, 41, 73-80.



Smith, A. M. (1990). Quality aspects of services marketing. *Marketing Intelligence & Planning*, 8(6), 25-32.

So, W. C., Wong, T. N., & Sculli, D. (2005). Factors affecting intentions to purchase via the Internet. *Industrial Management & Data Systems*, 105(9), 1225-1244.

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues and Research in Advertising*, 26(2), 53-66.

Wijaya, B. S. (2013). Dimensions of brand image: A conceptual review from the perspective of brand communication. *European Journal of Business and Management*, 5(31), 55-65.

Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341-352.

Zeithaml, V. A., Parasuraman, A. & Berry, L. L. (1985). Problems and strategies in services marketing. *Journal of Marketing*, 49, 33-46.