A Study on the Relationships among Body Sensory Experience, Customer Satisfaction and Customer Loyalty-Beauty SPA Center as an Example

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A STUDY ON THE RELATIONSHIPS AMONG BODY SENSORY EXPERIENCE, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY - BEAUTY SPA CENTER AS AN EXAMPLE

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INTRODUCTION

SPA was defined by the International SPA Association as “a place devoted to overall well-being through a variety of professional services that encourage the renewal of mind, body and spirit”. There are several types of SPA, such as club SPA, cruise ship SPA, day SPA, dental SPA, medical SPA, mineral springs SPA, resort/hotel SPA, and mobile SPA. The most numerous is day SPA, providing various professional SPA treatments to customers on a day-use basis. SPA treatments are non-medical services to help a customer’s physical and mental health being in a good condition.

They have a number of health benefits depending upon what customers are looking for in a SPA experience. Such practices can be enjoyed as a disengagement from day-to-day pressure, and have been widespread in the world.

Customer loyalty is the critical success factor of a beauty SPA center in today’s competitive market. Literature regarding to a beauty SPA center showed that customers’ sensory experience, satisfaction and loyalty were related to a fairly high degree of causal relationships. In this study, an attempt was made to explore the relationships among sensory experience, customer satisfaction and customer loyalty with respect to the customers of a beauty SPA. Mediation effect of customer satisfaction was also under consideration.

LITERATURE REVIEW

Sensory Experience

Schmitt (1999) proposed law concept of experiential marketing and defined it as after participating and observing in an event, customers identification or purchase behavior is elicited by stimuli, which in turn enhances the produce value. The theory foundation stated that a product or service can create a perfect set of system for the customer with sensory, influential, and related experiences which serve as activities related to lifestyle marketing and brand identification. What are sensory experiences? Sensory experience relates to the nature of observation, that promotes awareness of one or more of the five senses, through observation, you use your own senses to make sense of the world around you: visual, taste, smell, touch, hearing.

Lindstrom (2005) found that 83% of human use of visual to receive messages, therefore, the business will focus on the general sense of this performance, and invested considerable resources. The sense of visual is the most developed and prominent human sense (Pentz & Gerber, 2013). Of all five human senses, the sense of sight is then also the sense that has been focused on mostly by salesman (Pentz & Gerber, 2013; Elder et al., 2010; Hulten, Broweus, & Van Dijk, 2009). Therefore, Color can have important role in the success of marketing.
stimuli, such as the colour used in advertising or color used for package design (Pentz & Geber, 2013; Arnould, Price & Zinkhan, 2004; Wolfe, Kluener & Levi, 2006). Sense of smell is the most direct of senses, and odor can affect significantly an individual’s evaluation of things and other people (Pentz & Gerber, 2013; Aitamer & Zhou 2011; Arnould et al., 2004). The sense of smell can also be related to pleasure and happiness and is believed to be correlated closely to emotions and memories (Hulten, 2011). Teller and Dennis (2012) argue that the effect of ambient fragrance on Customer related reactions has received comparatively little attention from marketing researchers in the past. Even though hearing is largely considered to be secondary of sensory experience, when compared with the sense of visual, the auditory system is capable of picking up and conveying various kinds of information to the brain (Pentz & Gerber, 2013; Wright, 2006). Hulten (2011) points out that for hearing sense can be linked to feelings and emotions, and can impact sensory experience and customer satisfaction. Touch or tactile perception is a sense. Humans can feel through the skin with any part of their bodies, be it through the hands, feet, legs, face, head, chest (Pentz et al., 2013; Wright 2006). The as customer quest product quality, according to through their sense of touch, using fine-motor muscles, and as identifying product quality. The product materials have many touch sensory attributes - they may be warm or cool, wet or dry, rough or smooth, hard or soft, textured or slimy (Pentz & Gerber, 2013). Wolke (2002) indicates that the taste feel is of pleasure or aversion, depending on the individual’s physiological differences, past experience and eating habits.

Customer Satisfaction
Customer satisfaction has long been widely accepted among researchers as a strong predictor for behavioral variables (Bitner & Hubbert, 1994). Beerli, Martin and Quintana (2004) have defined an overall evaluation based on the total purchase and consumption experience focused on the perceived service or product performance compared expectations over time. Customer satisfaction with a past experience is related to satisfaction with the current visit to the same destination, and feelings of satisfaction with the current visit affect revisit behavior (Supitchayangkool, 2012). Customer satisfaction is a customer’s rational and emotional perception, which is based on service experiences (Matthew & Christine, 2000). Satisfaction is affected by the psychological and emotional conditions of the customer personal experiences (Baker & Crompton, 2000). Customer satisfaction is the key aspect considered in consumer research, like marketing, economic psychology, and economics (Akbar & Parvez, 2009). Bowen and Chen (2001) in their study identified the significant impact of customer satisfaction on customer loyalty. Customer satisfaction is seen as a post consumption evaluative judgment of a special purchase experience or activity (Bae, 2012). Huang and Liao (2015) also identified positive relationship between customer satisfaction and loyalty. The research purposes is beauty SPA center customer perception situation. Therefore, the customer satisfaction as a factor of this study.

Customer Loyalty
For all of the competitive business strategies, maintaining customer loyalty is properly the most important factors (Reichheld, 1996). Regarding evaluation of customer loyalty, Parasuraman, Zeithaml and Berry (1994) thought that items, which should be included, primary behavior, and secondary behavior, customer, repurchase intent, and people’s recommendations through positive word-of-mouth. Customer loyalty may go through four different stages, depending on the levels of commitment customers develop toward a product or service provider (Massoud, Huang & Erdogmu, 2012; Oliver, 1997). Customers are loyal at each phase relating to different theory of the attitude development structure. In other words, the drivers of loyalty are dynamic and complex, and change evolve over time (Johnson, Herrmann & Huber, 2006). The customer loyalty effect, explains the advantages of loyalty and brings behavior of repeat customers, including continued profit, reduced marketing costs, decreased operating costs, revenue growth, increased price premiums, and competitive advantage to companies (Kandampully, Juwaheer & Hu, 2011). Customer loyalty has been defined early as the willingness of customer to maintain their relations with a particular firm or service or product (Chandra, 2014; Rai & Medha, 2013).

RESEARCH DESIGN
Research Model and Hypotheses
Previous studies showed that customer satisfaction is the most important factor of customer loyalty. It was interesting in the effect of sensory experience on satisfaction and loyalty of the customers of a beauty SPA center. We therefore intended to study the relationships among sensory experience, customer satisfaction and customer loyalty. The research model considered in this study is shown in Figure 1.
According to the research model as given in Figure 1, four hypotheses were considered as follows:

H1: Sensory experience has positive effect on customer satisfaction.
H2: Sensory experience has positive effect on customer loyalty.
H3: Customer satisfaction has positive effect on customer loyalty.
H4: Customer satisfaction has a mediation effect on the relationships between sensory experience and customer loyalty.

**Questionnaire Design and Sampling**

The questionnaire was divided into two parts. First part of the questionnaire covered the profiles of the respondents, and the second part of the questionnaire measured the three constructs. The profiles of the respondents were composed of six characteristics, including gender, age, marital status, level of education, occupation, income per month (USD). The three constructs were composed of 25 items for sensory experience, 6 items for customer satisfaction, and 5 items for customer loyalty. Five-point Likert-type scales with the range from 1 (strongly disagree) to 5 (strongly agree) were used for the measurement of each questionnaire item.

The objective population of the study was the customers of a beauty SPA center. Data was collected by using convenience sampling. 201 out of 265 questionnaires were valid, and the effective response rate was 96.9%.

**Data Analysis Techniques**

In this study, we employed quantitative data and survey method to recognize the sensory experience, customer satisfaction and customer loyalty toward the customers of a beauty SPA center. Research questions were analyzed through Statistical Package for the Social Sciences (SPSS). There were six statistical analysis approaches, which included descriptive analysis, reliability analysis, factor analysis, independent samples t test, one-way Analysis of Variance (ANOVA), and regression analysis.

**TABLE 1**

Descriptive Statistics of Respondents’ Characteristics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Items</th>
<th>Frequency</th>
<th>Percent</th>
<th>Measure</th>
<th>Items</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>42</td>
<td>20.9%</td>
<td>Marital Status</td>
<td>Married</td>
<td>116</td>
<td>57.7%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>159</td>
<td>79.1%</td>
<td></td>
<td>Unmarried</td>
<td>85</td>
<td>42.3%</td>
</tr>
<tr>
<td>Age</td>
<td>≤ 20</td>
<td>8</td>
<td>4.0%</td>
<td>Occupation</td>
<td>Student</td>
<td>26</td>
<td>12.9%</td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>51</td>
<td>25.4%</td>
<td></td>
<td>Public servant</td>
<td>22</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>78</td>
<td>38.8%</td>
<td></td>
<td>Public servant</td>
<td>22</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>49</td>
<td>24.4%</td>
<td></td>
<td>Manufacturing</td>
<td>11</td>
<td>5.5%</td>
</tr>
<tr>
<td></td>
<td>≥ 51</td>
<td>15</td>
<td>7.5%</td>
<td></td>
<td>Commerce</td>
<td>29</td>
<td>14.4%</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Junior high school</td>
<td>10</td>
<td>5.0%</td>
<td>Self-employment</td>
<td>32</td>
<td>15.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior high school</td>
<td>56</td>
<td>27.9%</td>
<td>Service</td>
<td>50</td>
<td>24.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>College or university</td>
<td>87</td>
<td>43.3%</td>
<td>Other</td>
<td>31</td>
<td>15.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate school</td>
<td>48</td>
<td>23.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Per Month (USD)</td>
<td>≤ 600</td>
<td>41</td>
<td>20.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>601~1200</td>
<td>64</td>
<td>31.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1201~1800</td>
<td>39</td>
<td>19.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1801~2400</td>
<td>33</td>
<td>16.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥ 2400</td>
<td>24</td>
<td>11.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RESULTS
Descriptive Analysis for the Demographic Characteristics
Descriptive analysis was adopted to analyze the customers’ personal information. The results were shown in Table 1, which are summarized as follows: (1) Gender was mainly “female” (79.1%); (2) Age was mainly “31-40” (38.8%); (3) Marital status was mainly “married” (57.7%); (4) Level of education was mainly “college or university” (43.3%); (5) Occupation was mainly “service industry” (24.9%); (6) Income per month was mainly “USD$601~1,200” (31.9%).

Factor Analysis
Kaiser (1974) pointed that the Kaiser-Meyer-Olkin (KMO) indicator in factor analysis should be greater than 0.7, the Bartlett’s test of sphericity should be significant. As shown in Table 2, the KMO indicators of all constructs were higher than 0.7, and the Bartlett’s test of sphericity for each construct was significant, indicating that the data collected by this study were appropriate for factor analysis.

The results of factor analysis were presented in Table 3. All the factor loadings were greater than 0.5, implying that questionnaire items were not necessary be deleted. In addition, the sum of variance explained for each construct were respectively given by 64.240%, 55.665% and 63.814%. The results proved a considerable level of construct validity.

Reliability Analysis
The reliability was evaluated by Cronbach’s alpha. Guilford (1965) indicated that the value of Cronbach’s alpha should be more than 0.7 to ensure a high degree of internal consistency. From Table 4, the values of Cronbach’s alpha were ranged from 0.843 to 0.897, portraying a strong internal consistency.

Independent Samples t Test and One-way ANOVA
In what follows, we intended to assess the correlations of demographic characteristics with the three constructs. Independent samples t test was adapted for gender and marital status, and the remaining four characteristics were examined by using one-way ANOVA with Scheffe’s test of post-hoc comparisons. Differences were considered statistically significantly when $p < 0.05$. Results were shown in Table 5.

### TABLE 2

<table>
<thead>
<tr>
<th>Construct</th>
<th>KMO</th>
<th>Bartlett’s Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Chi-square</td>
</tr>
<tr>
<td>Sensory Experience</td>
<td>0.779</td>
<td>2710.484</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.835</td>
<td>493.770</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.730</td>
<td>576.886</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001

### TABLE 3

<table>
<thead>
<tr>
<th>Construct</th>
<th>Number of Items</th>
<th>Factor Loading</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory Experience</td>
<td>25</td>
<td>0.836~0.650</td>
<td>64.240%</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>6</td>
<td>0.502~0.864</td>
<td>55.665%</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>5</td>
<td>0.751~0.855</td>
<td>63.814%</td>
</tr>
</tbody>
</table>

### TABLE 4

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>Total Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensory Experience</td>
<td>0.860</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.843</td>
<td>0.897</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.857</td>
<td></td>
</tr>
</tbody>
</table>
As shown in Table 5, females expressed higher sensory experience than males. Income per month showed significant effect on customer satisfaction, where respondents with income per month higher than USD$2400 expressed significantly higher satisfaction than respondents with income per month lower than USD$1200. These results indicated the importance of gender and income per month.

Regression Analysis
The research hypotheses H1~H4 were tested by using regression analysis. The results were presented in Table 6. From model 1, the standardized regression coefficient of sensory experience was 0.445 (p < 0.001), indicating significantly positive effect of sensory experience on customer satisfaction. From model 2, the standardized regression coefficient of sensory experience was 0.463 (p < 0.001), indicating significantly positive effect of sensory experience on customer loyalty. From model 3, the standardized regression coefficient of customer satisfaction was 0.442 (p < 0.001), indicating significantly positive effect of customer satisfaction on customer loyalty. As a result, the three research hypotheses H1~H3 were not rejected.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sensory Experience</th>
<th>Customer Satisfaction</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1 &gt; 2</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Age</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Marital Status</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Education</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Occupation</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Income per month</td>
<td>3 &gt; 4, 5</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

T: Female, 2: Male, 3: Income ≥ 2400, 4: Income ≤ 600, 5: 601 ≤ Income ≤ 1200, N: Not significant

In order to examine the mediation effect of customer satisfaction, we made use of the evaluation criterion suggested by (Baron & Kenny, 1986). Since the three research hypotheses H1~H3 were not rejected, the preconditions of mediation effect held. After that, we checked the mediation effect whether to be complete or partial. Comparing the results given in models 2 and 4 in Table 6, the standardized regression coefficients of sensory experience reduced from 0.463 to 0.329, after adding customer satisfaction in the regression model. The regression coefficient 0.329 remained statistically significant. Consequently, customer satisfaction has a partial mediation effect on the relationships between sensory experience and customer loyalty. The hypothesis H4 was not rejected.

DISCUSSION
The purpose of this study was to examine the relationships among sensory experience, customer satisfaction and customer loyalty. The data was sampled from the customers of a beauty SPA center by using a structured questionnaire. With respect to the previous results, the research findings were discussed as follows. Among all the pairwise relationships between demographic characteristics and constructs, only two pairs of them were correlated. Gender was correlated with sensory experience, while income per month was correlated with customer satisfaction. We observed these features, but the probable causes remained unobtainable. Managers and/or employees of the beauty SPA center may pay much attention to find out the latent causes...
behind the relevancies. With reference to the causal relationships among the three constructs, it was observed that all of the pairwise relationships were positively correlated, and the mediation effect of customer satisfaction was verified as partial. These results indicated that sensory experience positively affects customer satisfaction, which in turn affects customer loyalty. Since sensory experience and customer satisfaction are important predictors of customer loyalty, stakeholders of the beauty SPA center are encouraged to enhance sensory experience and customer satisfaction so that loyalty of customers could be improved. Such an effort not only increases the number of returning customers, but attracts also the potential customers.

**CONCLUSION**

This study was worked out to investigate the relationships among sensory experience, customer satisfaction and customer loyalty. Future studies could consider other constructs, such as brand equity, perceived value and service quality, for establishing a complete research model. The region scope of this study was limited to Taiwan, such that the results may not be applicable in other areas. The objective population could be changed to other countries or industries. Instead of a cross-sectional approach, future studies could also be worked out by a longitudinal approach.

**REFERENCES**


Bae, Y. H. (2012). *Three essays on the customer customer loyalty association*. University of Iowa, Iowa, IA.


— This article does not have any appendix. —