Empirical Verification of Tourists’ Purchasing Souvenirs Behavior Model: Take Tamsui’s Souvenirs as an Example

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Abstract: This study aims to verify the correlation between Tamsui souvenirs’ brand awareness, local culture, price promotion, store atmosphere, consumers’ purchase intention, and consumers’ purchase behavior. The questionnaire survey method was used for data collection and tourists who visited Tamsui Old Street were chosen as research participants. A total of 700 questionnaire copies were distributed, and 600 valid samples were collected, with a valid return rate of 85.7%. The results showed that brand awareness has a positive influence on consumers’ purchase intention, local culture has a positive influence on purchase intention, price promotion has a positive influence on purchase intention, and store atmosphere has a positive influence on consumers’ purchase intention. However, brand awareness, local culture, price promotion, and store atmosphere have no significant influence on consumers’ purchase behavior whilst consumers’ purchase intention has a positive influence on consumers’ purchase behavior. The percentage of the variance of consumers’ purchase intention explained by brand awareness, local culture, price promotion, and store atmosphere is 52%. The findings can provide a reference for relevant studies in the future.

Keywords: Souvenirs, purchase intention, purchase behavior.

1. INTRODUCTION

Besides appreciating natural sceneries and experiencing local traditions and customs, tourists like to purchase merchandises or souvenirs with elements of local culture (Liu, 2002) for memory keeping. Other than for personal use, souvenirs can also be given as gifts to families and friends (Yang, 1999). Sales of souvenirs sales bring in the main source of income for local stores. Selling souvenirs even generates a higher revenue than providing food and beverages, accommodation, and transportation (Sun, 2003). Therefore, designing souvenirs with elements of local culture can develop local tourism and increase economic returns from tourism (Hsiao, 2004).

Swanson (1994) pointed out that the classification of souvenirs may affect tourists’ purchase intention and behavior, shape tourists’ predilection for souvenirs, and satisfy tourists’ wish of bringing home an object which symbolizes travel memories. Rare and precious handicrafts are seen as souvenirs yet not all souvenirs are exquisite handicrafts. For example, the wide selections of Tamsui souvenirs encompass Tamsui iron eggs, fried fish crackers, pastries, large flatbreads, etc. With the strongest elements of local culture, Tamsui iron eggs have experienced the rapidest development in recent years amongst all other souvenirs (Yang, 2009). Marketing stories which associate Tamsui iron eggs with folklore, the use of different packaging, the invention of new flavors, and the use of diverse online channels have not only made Tamsui iron eggs one of the Top 10 souvenirs in New Taipei City and renowned local specialties in Taiwan but also created enormous business opportunities in Tamsui area.

This study intends to explore the factors relating to consumers’ intention and behavior to purchase souvenirs with elements of Tamsui local culture. Consumers’ purchase intention refers to consumers’
purchase likelihood (Dodds, Monroe, and Grewa, 1991). A stronger purchase intention signifies better purchase likelihood and a higher level of satisfaction. As such, purchase intention is an important antecedent for the prediction of purchase behavior (Schiffman and Kanuk, 2004). Being able to highlight a product’s cultural values and correspond with local folk customs and design ideas, souvenirs which feature elements of local culture as the predominant value usually attract tourists’ purchase intention and purchase behavior (Zhang and Shang, 2010).

According to previous research, there is a positive correlation between consumers’ familiarity with a product, consumers’ confidence and attitudes towards the product, and consumers’ purchase behavior (Macdonald and Sharp, 2000). Aaker (1996) defined brand awareness as consumers’ ability to distinguish or recall a certain type of product. Consumers’ brand awareness is a precondition for communication. Besides, consumers’ awareness of the brand of a souvenir would affect consumers’ thought of purchasing the souvenir (Lin, 2005; Biswas, 1992). Price promotion refers to a company reducing the price of a product or service or providing customers with additional product or service discounts with customers paying the same price (Raghubir and Corfman, 1999). Price promotion is often used to stimulate consumers’ purchase behavior (Belch & Belch, 2003). Store atmosphere refers to deliberate control and creation of environmental hints or deliberate space design in order to produce some effects that make store customers purchase products or services from the store. The setting at which a merchandise is placed is an important determinant of consumers’ decision making (Sirgy, Joseph, and Tamara, 2000).

A model of factors that affect tourists’ souvenir purchase behavior was therefore constructed. In the model, brand awareness, local culture, price promotion, and store atmosphere have a positive influence on tourists’ purchase intention and purchase behavior whilst consumers’ purchase intention has a positive influence on tourists’ actual purchase behavior.

2. METHODS

2.1. Participants

Tourists in the stores on Tamsui Old Street were chosen as research participants. The stratified quota sampling technique was utilized to hand out 700 questionnaire copies, and 600 valid questionnaire copies were returned, a valid response rate of 85.7%. The research participants are made up of 234 males (39.0%) and 366 females (61.0%). In terms of the research participants’ age, 54 consumers were 18 years old (9.0%), 252 consumers were between 19 and 30 years old (42.0%), 144 consumers were between 31 and 40 years old (24.0%), 71 consumers were between 41 and 50 years old (11.8%), and 79 consumers were over 50 years old (13.2%) at the time when the questionnaire survey. In terms of marital status, 211 research participants were married (36.8%), 369 research participants were single (61.5%), and 10 research participants ticked the “others” option (1.7%). In terms of the highest educational attainment, 69 research participants were in the junior high school or under group (11.5%), 182 research participants were in the senior high school and vocational senior high school group (30.3%), 305 research participants were in the college and university group (50.8%), 44 research participants were in the postgraduate study group (7.3%).

2.2. Tools

The questionnaire for this study consists of five parts. The first part is research participants’ basic information including gender, age, marital status, highest educational attainment, and scales for research participant’s brand awareness, store atmosphere, price promotion, local culture, purchase intention, and purchase behavior. All scales were designed with reference to research by Aaker (1996), Yang (2009), Raghubir and Corfman (1999), Bitner (1992), Chen, Chang, and Lei et al. (2014). The 5-point Likert scale was used for answering all questions on the questionnaire. One to five points were given to answer choices from “strongly agree” to “strongly disagree”.

2.3. Data Analysis

Partial least squares regression (PLS regression) was employed to analyze a total of 16 research hypotheses proposed by this study. Partial least squares regression, which is based on regression analysis, is a statistical method for a route analysis. Among a wide variety of PLS analytical software, the Warp PLS version 5.0 statistical software developed by Kock (2015) was adopted in this study.
3. RESULTS

3.1. Measurement Model

This study adopted a PLS model and the Warp PLS version 5.0 statistical software developed by Kock (2015) to verify all scales’ validity and reliability. According to the suggestion by Hulland (1999), an analysis of the validity and reliability of all relevant scales in a model shall examine items’ reliability, convergent validity, and discriminant validity.

3.2. Reliability

Composite reliability (CR) and Cronbach's coefficient alpha are used to measure the reliability of each item. According to the suggestion of Fornell and Larcker (1981), the CR value and the Cronbach’s α value must be equal to or bigger than .70. As revealed by an analysis of the component reliability value and the Cronbach’s α value of each variable in the research model produces, the component reliability value is .896 and the Cronbach’s α value is .855 for brand awareness, the component reliability value is .836 and the Cronbach’s α value is .738 for local culture, the component reliability value is .913 and the Cronbach’s α value is .881 for price promotion, the component reliability value is .914 and the Cronbach’s α value is .882 for store atmosphere, the component reliability value is .938 and the Cronbach’s α value is .911 for purchase intention, and the component reliability value is .876 and the Cronbach’s α value is .716 for purchase behavior. Overall speaking, the component reliability value and the Cronbach’s α value of all variables are all bigger than .70 and meeting the required standard, meaning that the research model’s reliability reaches an acceptable level.

3.3. Convergent Validity

According to the suggestion of Hair, Black, Babin, and Anderson (2009), a factor loading value must be higher than .50, and an item with a factor loading value smaller than .50 has to be deleted. In this study, we use the factor loading values of measured variables on latent variables to verify each dimension’s convergent validity. According to results of verification, the factor loading values of all measured variables are between .72 and .90 (bigger than .50) and meeting the requirement suggested by Hair, Black, Babin, and Anderson (2009). Therefore, all latent variables in this study have good convergent validity.

3.4. Discriminant Validity

In the research model, the square roots of the average variance extracted (AVE) values of all latent variables are between .749 and .889 (bigger than .70). Also, the AVE values of all latent values are higher than all relevant values at the same column or the same row and meeting the standard for verification, showing the measuring model’s good discriminant validity.

### Table 1. Discriminant validity of constructs

<table>
<thead>
<tr>
<th></th>
<th>Brand awareness</th>
<th>Local culture</th>
<th>Price promotion</th>
<th>Store atmosphere</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand awareness</td>
<td>.796</td>
<td>.507</td>
<td>.534</td>
<td>.489</td>
<td>.491</td>
</tr>
<tr>
<td>Local culture</td>
<td>.507</td>
<td>.749</td>
<td>.433</td>
<td>.439</td>
<td>.480</td>
</tr>
<tr>
<td>Price promotion</td>
<td>.534</td>
<td>.433</td>
<td>.823</td>
<td>.548</td>
<td>.541</td>
</tr>
<tr>
<td>Store atmosphere</td>
<td>.489</td>
<td>.439</td>
<td>.548</td>
<td>.825</td>
<td>.645</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>.491</td>
<td>.480</td>
<td>.541</td>
<td>.645</td>
<td>.889</td>
</tr>
<tr>
<td>Purchase behavior</td>
<td>.113</td>
<td>.057</td>
<td>.099</td>
<td>.112</td>
<td>.163</td>
</tr>
</tbody>
</table>

**Note:** Diagonals represent the average variance extracted (the square root of the average variance extracted in the parentheses) while the other entries represent the correlations.

3.5. The Structural Model and Hypothesis Testing

After examining the measurement model’s validity and reliability to ensure the research framework’s good validity and reliability, this study examined the structural model. A researcher should consider the following two elements when using partial least squares regression to analyze and validate a structural model: (1) standardized path coefficient; (2) the R² value which is used to determine a model’s explanatory power (Chin, 1998; Fornell and Larcker, 1981). The standardized path...
coefficients and $R^2$ value of all latent variables could indicate the goodness of fit between a structural model and empirical data. The standard path coefficient should reach statistical significance. The $R^2$ value is used to determine a model’s explanatory power, and a higher $R^2$ value indicates a stronger explanatory power.

Path coefficients are used to represent the strength and direction of relations between variables. In order to establish the relationship between predictor variables and criterion variables, path coefficients should reach a significant level and coincide with the predicted direction of research hypotheses. This study used the WarpPLS version 5.0 statistical software to check the structural model. The structural equation modeling (path analysis) and results are presented in Figure 1. The path coefficient values on the direction paths in Figure 1 are standardized regression coefficients; $\beta$ value). Results of an analysis of this study’s hypotheses are shown below:

H1: According to results of the analysis, the influence of brand awareness on purchase intention reaches a level of significance ($\beta_1 = .09$, $p<.05$), indicating a positive correlation between consumers’ brand awareness of Tamsui souvenirs and consumers’ purchase intention.

H2: According to results of the analysis, the influence of local culture on purchase intention reaches a level of significance ($\beta_2 = .18$, $p<.05$), indicating a positive correlation between consumers’ opinions about Tamsui souvenirs’ local culture and consumers’ purchase intention.

H3: According to results of the analysis, the influence of price promotion on purchase intention reaches a level of significance ($\beta_3 = .21$, $p<.05$), indicating a positive correlation between consumers’ perception of price promotion of Tamsui souvenirs and consumers’ purchase intention.

H4: According to results of the analysis, the influence of store atmosphere on purchase intention reaches a level of significance ($\beta_4 = .41$, $p<.05$), indicating a positive correlation between consumers’ perception about the atmosphere at a Tamsui souvenir and consumers’ purchase intention.

H5: According to results of the analysis, the influence of brand awareness on purchase behavior reaches a level of significance ($\beta_5 = .03$, $p>.05$), indicating consumers’ brand awareness of Tamsui souvenirs Tamsui has no influence on consumers’ purchase behavior.

H6: According to results of the analysis, the influence of Tamsui souvenirs’ local culture on consumers’ purchase behavior reaches a level of significance ($\beta_6 = .04$, $p>.05$), indicating Tamsui souvenirs’ local culture has no influence on consumers’ purchase behavior.

H7: According to results of the analysis, the influence of price promotion on purchase behavior reaches a level of significance ($\beta_7 = .04$, $p>.05$), indicating Tamsui souvenirs’ price promotion has no influence on consumers’ purchase behavior.

H8: According to results of the analysis, the influence of store atmosphere on consumers’ purchase behavior reaches a level of significance ($\beta_8 = .00$, $p>.05$), indicating the atmosphere at Tamsui souvenir stores has no influence on consumers’ purchase behavior.

H9: According to results of the analysis, the influence of purchase intention on consumers’ purchase behavior reaches a level of significance ($\beta_9 = .16$, $p<.05$), indicating a positive correlation between consumers’ intention to purchase Tamsui souvenirs and consumers’ actual purchase behavior.

3.6. Explanatory Power

The $R^2$ value represents a model’s explanatory power, which is the percentage of an endogenous variable explained by exogenous variables. A bigger $R^2$ is associated with a stronger explanatory power. As shown by research results presented in Figure 4-1, the $R^2$ value for the variance of consumers’ purchase intention explained by brand awareness, local culture, price promotion, and store atmosphere is .52 (52%). The $R^2$ value for the variance of consumers’ purchase behavior explained by brand awareness, local culture, price promotion, store atmosphere, and purchase intention is .04 (4%).
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4. DISCUSSION

As indicated by results of this research model, brand awareness, local culture, price promotion, and store atmosphere have a positive influence on consumers’ purchase intention. In particular, store atmosphere has the strongest influence on consumers’ purchase intention. Such results support results of previous studies that a physical environment not only stimulates and affects consumers’ emotional aspects but also affect consumers’ purchase intention (Baker, Parasuraman, Grewal, and Voss, 2002). For that reason, in the course of consumers’ shopping experience at a souvenir store, a design which turns a store environment into a physical space permeated with a good atmosphere, naturally lead consumers in the direction of the store’s strategies, and lead to a series of purchasing and experiential behavior is what the souvenir store has to work on. Essentially, it helps generate more conjured images resulting from consumers’ inner cognizance, elevate consumers’ perceived value of a product, and in turn influence consumers’ purchase intention (Roy and Tai, 2003; Sharma and Stafford, 2000). Some suggestions by Baker, Parasuraman, Grewal and Voss (2002) are as follows: 1) Stores may increase consumers’ awareness of store service personnel. For example, service personnel may wear distinctive work clothes, have physical or hand gestures with a special meaning, and show polite and courteous manner in order to draw the attention of consumers and make a deeper impression. 2) Stores may enhance consumers’ perception of store music as music usually has the function of relaxing a person’s mood and arousing consumers’ emotional connections. Therefore, having matching music would affect consumers’ purchase behavior (Milliman, 1986). 3) Stores may strengthen elements of a store’s visual design. For example, a good designer may be hired to effectively plan the interior design, product display arrangements, the design of display windows, the fabric of store carpets, the contrast of colors inside the store, the brightness of lighting, etc. in order to create a favorable shopping environment and give consumers a positive impression and shopping experience (Sirgy, Joseph, and Tamara, 2000). The result that purchase intention has a positive influence on consumers’ purchase behavior is coincide with previous research’s suggestion that purchase intention, which refers to consumers’ inclination toward the action about a certain product, is able to predict consumers’ purchase behavior (Zhang and Shang, 2010; Schiffman and Kanuk, 2000). In this research model, the percentage of the variance of consumers’ purchase intention explained by brand awareness, local culture, price promotion, and store atmosphere is 52%, indicating the four independent variables’ good explanatory power.

This study found that variables including brand awareness, local culture, price promotion, and store atmosphere do not affect consumers’ actual souvenir purchase behavior, a result which contradicts with results of previous research on other merchandises (Schiffman and Kanuk, 2000). A possible explanation is that Tamsui souvenirs such as iron eggs, fried fish crackers, and large flatbreads are all inexpensive food products with an expiration or best before date. Therefore, except for increasing consumers’ consumer purchase intention, variables including brand awareness, local culture, price promotion, and store atmosphere are not powerful enough to have direct impacts on consumer’s actual purchase behavior. This phenomenon was never found in previous research results. Further empirical research on food souvenirs are recommended to understand the stability of such a phenomenon and result.
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