Determinants and Impacts of Customers’ Menu Choice Regarding the Familiarity in the Authentic Chinese Restaurant Context

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DETERMINANTS AND IMPACTS OF CUSTOMERS’ MENU CHOICE REGARDING THE FAMILIARITY IN THE AUTHENTIC CHINESE RESTAURANT CONTEXT

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ABSTRACT

The study examined the determinants and impacts of menu choice (familiar food versus novel food) in an authentic Chinese restaurant setting. A conceptual model is built to explore the linkages between determinants (perceived risk taking and physical environment) and outcome variables (disconfirmation, customer satisfaction, revisit intention, and word-of-mouth intention). A structural equation modeling analysis revealed that perceived risk-taking had significant effects on the menu choice regarding the familiarity, while menu choice had significant effects on disconfirmation, which in turn had a significant influence on customer satisfaction. Additionally, customer satisfaction had significant impacts on both revisit intention and word-of-mouth intention. The results of the study will benefit restaurateurs on marketing strategies.

Key Words: Menu choice (familiar food versus novel food), perceived risk taking, disconfirmation, customer satisfaction, loyalty, authentic Chinese restaurant

INTRODUCTION

During the past decades, the U.S. has become more diverse culturally and ethnically (Josiam & Monteiro, 2004, Sukalakamala & Boyce, 2007). The cultural and ethnic diversity specified the success of ethnic restaurants in the U.S. foodservice market (Liu & Jang, 2008). About 65% of foodservice sales are ethnic food sales (US Ethnic foods market, 2009). The most popular ethnic restaurants account for more than 70% of the dinners in the U.S. (Life in the USA, 2010). Among a variety of ethnic cuisines, a great attention has been paid to Asian ethnic food, particularly Chinese food in the United States (NRA, 2000b). There are about 41,000 Chinese restaurants in the U.S., which is three times larger than the number of McDonalds. Chinese restaurants generated $17 billion in annual sales (Life in the USA, 2010).

Despite the importance of the ethnic restaurants in the hospitality industry, it has not received much attention in research. The few research studies on ethnic restaurants focused on customers’ motivations, selection criteria for eating, the role of authenticity, perceptions and expectations related to dining experiences, and the attributes affecting customer satisfaction and behavioral intentions in the ethnic restaurants (Ebster & Guist, 2004; George, 2001; Liu & Jang, 2008; 2004; Sukalakamala & Boyce, 2007). However, to the best of our knowledge none of previous studies has addressed an important question: “what factors influence customers’ menu choice with regards to the familiarity (ordering familiar food versus novel food) and how the decision influences their satisfaction and intended loyalty in the authentic restaurant context”. In addition, there is still a great need of examining the relative impact of tangible quality (physical environment) and intangible quality (service quality) on outcome variables such as overall disconfirmation, customer satisfaction, and loyalty across various service industries. Thus, this study aimed at filling these gaps. The purpose of the study is to examine factors affecting customers’ menu choice and the impact of the menu choice on disconfirmation, customer satisfaction, revisit
intention (RVI), and word of mouth intention (WOMI). The findings of this study will help the authentic restaurant
management understand customers’ decision making with regards to the menu choice and further develop marketing
strategies to stay ahead of the competition.

LITERATURE REVIEW

1. Perceived risk taking

A number of factors influence consumer’s purchase decisions. The level of uncertainty and anxiety
consumers feel has been identified as perceived risk (Lacey et al., 2009), which is defined as a subjective
expectation of a loss (Stone & Gronhaug, 1993). Roselius (1971) addressed four categories of loss: time, hazard, ego
and money. Schiffman and Kanuk (2006) extended risk categories into the following six: functional, physical,
financial, social, psychological, and time. They further revealed that the levels of perceived risk experienced were
determined by both external factors and individual characteristics of customers. Gluckman (1986) conducted a study
on UK wine purchasing; four types of risk were explored regarding consumers’ perceptions: 1) functional (the wine
will not taste good), 2) social (family or friends will not approve of the choice), 3) financial (the wine price/quality
ratio), and 4) physical (hangover).

According to Gluckman (1986), whenever consumers did not have enough knowledge to make decisions or
they did not want to appear ignorant, they were under fear and anxiety. However, perceived risk reduced when
consumers have experience with unfamiliar products (Sheth & Venkatesan, 1968). Chaudhuri (1997) explored a
strong relationship between risk perceptions and negative consumption. The consumption related emotions can
directly impact satisfaction and dissatisfaction (Mano & Oliver, 1993). Perceived risk might also influence
consumer satisfaction, perceived value, and perceived quality (Sweeney et al., 1999; Rust et al., 1999). Ariely and
Levav (2000) reported that the risk seeking behavior is significant in the group dining. It was noted that restaurant
consumers preferred unfamiliar wines, in order to differentiate themselves when dining with a group.

2. Physical environment

Physical environment refers to the manmade physical settings that controlled by restaurateurs (Han & Ryu,
2009). Mehrabian & Russel (1994) stated that physical environment is able to alter human behavior. They proposed
that humans respond to the physical environment in two ways: approach and avoidance. The first refers to favorable
responses to the environment of a place while the latter refers to unfavorable responses to the environment of a place.
Other studies found that physical environment has positive impact on consumer behaviors (Reimer & Kuehn, 2005;
Wakefield & Blodgett, 1996), stressing the important role of atmosphere for a firm’s success. Sukalakamala and
Boyce (2007) reported that the customers are more concerned with the overall atmosphere. Ryu and Jang (2007)
explored the influence of customers’ perceptions of physical environments on emotions (pleasure and arousal) and
their behavior intentions in an upscale restaurant. In addition, Han and Ryu (2009) found physical environmental
dimensions (e.g., decor and artifacts, and spatial layout) have strong impact on customers’ perceived price. The
results showed décor and artifacts were the most significant predictor of perceived price and customer satisfaction.

3. Menu Choice

Understanding consumers’ decision making process (e.g., menus choice in an authentic restaurant) is critical to
successful marketing and product development (Sirakaya, Sheppard & Melellan, 1997). Based on Labersky et al.
(2001), a menu is defined as a list of food and beverage ready for purchase. The menu is a way of positioning and a
marketing plan of the restaurant operation (Shock, Bowen, & Stefanelli, 2004). Studies have been done on menu
related topics, such as menu engineering, which was described as menu planning and development (Kwong, 2005,
Morrison, 1996), menu layout and design (Kincaid & Corson, 2003; Reynolds, Merrit & Pinckney, 2005) and menu
content and variability (Antun & Gustafson, 2005; Bernstein et al., 2008; Ravneberg, 2006).

Kahn (1995) found that consumers prefer selection of services or goods. He explored three major reasons for
this need: satiation/stimulation; external situations; and future preference uncertainty. He concluded that consumers
seek variety because either they have been having too much with the familiar food or they are willing to try new
things. External situations such as time considerations, seasonality, and promotional activities may also cause change in consumer choices. Three constructs are identified by Hirschman (1984) to explain the experience seeking behavior: cognition seeking, sensation seeking, and novelty seeking. In particular, he defined novelty seeking as a willingness to try new things, which would imply the consumer choice. However, consumers may select a familiar food entry in order to reduce potential risk. This tendency is defined as inertia (Bawa, 1990). Based on all the above, the following hypotheses are proposed:

- **H1:** Perceived risk taking has positive effect on menu choice (ordering familiar food versus novel food).
- **H2:** Physical environment has positive effect on menu choice.

![Figure 1 Conceptual Model](image)

Note: RT = Perceived Risk taking, PE = Physical Environment, MC = Menu Choice (familiar food versus novel food), DC = Disconfirmation, CS = Customer Satisfaction, RVI = Revisit Intention, WOMI = Word-Of-Mouth Intention

4. Disconfirmation and Customer satisfaction

The application of disconfirmation theory is a common approach to examine customer satisfaction (Oh, 1999). The discrepancy between the service expectation and the actual service they received is disconfirmation of expectation (Oliver, 1980). If perceptions exceed expectations, a positive disconfirmation is likely to occur. If perceptions fall below expectations, a negative disconfirmation is likely to occur. When perceptions equal expectations, zero disconfirmation or simple confirmation is likely to occur (Oliver, 1980). Satisfaction was originally defined as disconfirmation (Miller, 1976). However, recently more scholars have viewed disconfirmation as a determinant of customer satisfaction (Oliver, 1981, Yi, 1993). Wirtz and Bateson (1999) found that disconfirmation had direct impact on satisfaction. It is logical to think that consumer’s menu choice may be influential in disconfirmation and satisfaction, which in turn influence customer satisfaction. This leads to the following hypotheses:

- **H3:** Menu choice has positive effect on disconfirmation.
- **H4:** Menu choice has positive effect on customer satisfaction.
- **H5:** Disconfirmation has positive effect on customer satisfaction.

5. Revisit intention and Word-Of-Mouth Intention

Oliver (1981) proposed that customer satisfaction was determined by disconfirmation. He further revealed the potential behavioral outcomes of customer satisfaction/dissatisfaction in a retail setting. Oh (1999) also tested a model in a luxury hotel setting and found that customer satisfaction was positively related to both repurchase intention and intent to spread positive word of mouth about the hotel. Similarly, Ha and Janda (2004) reported the positive effect of satisfaction to both loyalty and repurchase intention in an online shopper survey. Additionally, Streebing (1996) found that revenue can be generated by attracting new customers through word-of-mouth recommendations and increasing repeat customers. Positive word-of-mouth comes out from satisfactory service encounters and vice versa (Susskind, 2002). These suggest the following hypotheses:

- **H6:** Disconfirmation has positive effect on revisit intention and word-of-mouth intention.
- **H7:** Customer satisfaction has positive effect on revisit intention and word-of-mouth Intention

Based on aforementioned discussions, this study proposes the conceptual model that shows the relationships among the variables as shown in Figure 1.
METHOD

Measurements
Based on previous research (Crang et al., 2004; Kim & Geistfeld, 2003; Namkung & Jang, 2007; Oh, 1997; Weiss et al., 2004) and a pilot test, a questionnaire was developed to assess the variables used in this study. Multiple items were used to measure all latent variables (i.e., perceived risk taking, physical environment, menu choice, disconfirmation, customer satisfaction, revisit intention, and word-of-mouth intention) with a 7-point scale (1= extremely disagree, 7 = extremely agree). First, risk taking was measured with four items: “I would like to try unusual items when I eat out”; “I would like try any new product one”; “I find it safer to order dishes I am familiar with”; and “I am cautious in trying new/different products.” Second, to assess how customers perceived the quality of dining environments, respondents were asked to rate four items (e.g., “Dining area has an attractive inter design/décor”) (Ryu & Jang, 2008). Third, overall disconfirmation was measured with two items (e.g., “Overall dining experience was better than expected”) (Bigne et al., 2008; Oliver, 1980; Wirtz & Bateson, 1999). Fourth, customer satisfaction was assessed with three items (e.g., “Overall, I am satisfied with overall experience in this restaurant”) (Oliver, 1997). Fifth, revisit intention was measured with two items (e.g., “I would like to come back to this restaurant in the future”). Sixth, word-of-mouth intention was measured with three items (e.g., “I would like recommend this restaurant to others”). Seventh, to identify if the participants ordered a familiar menu or novel menu item, two questions (e.g., “I ordered a new menu today in this restaurant”) were asked. Finally, demographic variables were measured. Demographic questions included gender, age, race, education, and income.

Data Collection and Analysis
Using a convenience sampling approach, the data were collected from an authentic Chinese restaurant located in southern east state in the U.S. A total of 375 questionnaires were distributed to restaurant customers and 300 cases were coded for data analysis, representing an effective response rate of 75%. Among 300 responses, the sample was divided fairly equally between males (49.5%) and females (50.5%). About 27.8% were younger than 35 years of age, 49% were between 36 and 55 years, and 23% were older than 55 years. Approximately 57.9% of the customers were Caucasian, 21.7% were Asian, 12.4% were Hispanic, and 8% were African American. The collected data were analyzed using SPSS for Window 17.0 and AMOS 5. Following the procedure were suggested by Anderson and Gerbing (1988), a measurement model was tested before the structural model. A confirmatory factor analysis (CFA) was used to test data quality including reliability and construct validity checks. Structural equation modeling (SEM) was conducted to assess the overall fit of the proposed model and test hypotheses.

RESULTS

Measurement model
Prior to analysis, the data were examined for accuracy, missing data, and the assumptions underlying the general linear model. Using Mahalanobis distance with p < .001, a total of fourteen cases were identified as multivariate outliers. These outliers appeared to be random in the data set and were deleted. A total of 286 cases were left for further analysis. A measurement model was estimated using the maximum likelihood estimation method. The CFA results were not fit well (χ²=449.75, df=224, p<.001 (χ²/df = 2.008, root mean square error of approximation [RMSEA] = 0.049, comparative fit index [CFI] = 0.903, [TLI] = 0.88). Modification Indices were used for improving and three covariances were added to the measurement model according to results of AMOS. The measurement model fit was significantly improved (χ²=373.80, df=221, p<.001 (χ²/df = 1.69, [RMSEA] = 0.049, [CFI] =0.934, [TLI] =0.92. The following table showed the results.

<table>
<thead>
<tr>
<th>Measurement Items (Cronbach’s Alphas)</th>
<th>Factor Loading</th>
<th>Item Reliability</th>
<th>Composite reliabilities</th>
<th>AVE</th>
<th>error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Risk-taking (0.867)</td>
<td></td>
<td>0.904</td>
<td>0.625</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Zhong and Ryu: Determinants and Impacts of Customers’ Menu Choice Regarding the Familiarity in the Authentic Chinese Restaurant Context

| RT1: try unusual items in restaurant | 0.832 | 0.692 | 0.245 |
| RT2: try any new product once | 0.859 | 0.738 | 0.195 |
| RT3: safer to order familiar with | 0.695 | 0.483 | 0.325 |
| RT4: cautions in trying new/different | 0.765 | 0.585 | 0.293 |
| Physical Environment (0.740) | 0.885 | 0.397 |
| PE1: attractive interior design/decor | 0.613 | 0.376 | 0.254 |
| PE6: background music is pleasing | 0.721 | 0.520 | 0.223 |
| PE8: dining areas are clean | 0.654 | 0.428 | 0.147 |
| PE9: layout makes it easy to move | 0.514 | 0.264 | 0.186 |
| Menu Choice (0.756) | 0.800 | 0.606 |
| MC1: ordered familiar menu item | 0.755 | 0.570 | 0.334 |
| MC2: ordered new menu item | 0.801 | 0.642 | 0.273 |
| Disconfirmation (0.671) | 0.845 | 0.480 |
| DC1: overall dining experience | 0.623 | 0.388 | 0.154 |
| DC2: overall expectation | 0.756 | 0.572 | 0.195 |
| Customer Satisfaction (0.709) | 0.812 | 0.234 |
| CS1: satisfied with overall experience | 0.476 | 0.227 | 0.114 |
| CS2: feel in good mood | 0.506 | 0.256 | 0.18 |
| CS3: really enjoyed myself | 0.467 | 0.218 | 0.191 |
| Revisit Intention (.588) | 0.785 | 0.395 |
| RV1: would like to come back | 0.647 | 0.419 | 0.245 |
| RV2: consider revisit in the future | 0.609 | 0.371 | 0.187 |
| Word-Of-Mouth Intention (.773) | 0.884 | 0.454 |
| WOMI1: recommend to others | 0.754 | 0.569 | 0.18 |
| WOMI2: say positive things | 0.696 | 0.484 | 0.169 |
| WOMI3: encourage others to visit | 0.557 | 0.310 | 0.182 |

Note: AVE = Average variance extracted.

Structural Equation Model

Structural Equation Modeling to examine the conceptual model was conducted using the maximum likelihood estimation method. The standardized parameter estimates and t values are reported in the upper part of Table 2, while the model fit indices of the structural equation modeling are presented in the lower part of Table 2. The overall model fit was satisfactory ($\chi^2=379.703$, $df=237$, $p<.001$; $\chi^2/df=1.602$, [RMSEA] = 0.045, [CFI] =0.947, [TLI] =0.933. Perceived risk-taking was significant predictors of menu choices in authentic Chinese restaurants. The results showed that risk taking influenced the menu choice positively (coefficients=.56, $t=15.358$), supporting Hypothesis 1. Menu Choice was a good predictor of disconfirmation (coefficients =.16, $t=2.169$), which supported Hypothesis 3. Results also support Hypothesis 5, 6, and 7, with linkage between disconfirmation and customer satisfaction (coefficients=.54, $t=4.434$); customer satisfaction and revisit intention (coefficients=1.178, $t=6.722$); customer satisfaction and work-of-mouth intention (coefficients=.948, $t=6.491$) respectively. However, the linkage between physical environment and menu choice (coefficients=-.001, $t=-.029$) and menu choice and
customer satisfaction (coefficients=.006, \( t = .092 \)) were not significant, therefore, Hypothesis 2 and 4 were not supported. Although the path from menu choice to customer satisfaction was not significant, it could still affect customer satisfaction through disconfirmation (mediator). While path from menu choice to disconfirmation (\( t = 2.169; p < .05 \)) and path from disconfirmation to customer satisfaction (\( t = 4.434; p < .001 \)), the path from menu choice to customer satisfaction (\( p > .05 \)) was not significant. This indicated that disconfirmation played as a full mediator on the relationship between menu choice and customer satisfaction.

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Standardized Path coefficients</th>
<th>t-value</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Perceived Risk-taking ( \rightarrow ) Menu Choice</td>
<td>0.994</td>
<td>15.358***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Physical Environment ( \rightarrow ) Menu Choice</td>
<td>-0.001</td>
<td>-0.029</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H3: Menu Choice ( \rightarrow ) Disconfirmation</td>
<td>0.163</td>
<td>2.169*</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Menu Choice ( \rightarrow ) Customer Satisfaction</td>
<td>0.006</td>
<td>0.092</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H5: Disconfirmation ( \rightarrow ) Customer Satisfaction</td>
<td>0.544</td>
<td>4.434***</td>
<td>supported</td>
</tr>
<tr>
<td>H6: Customer Satisfaction ( \rightarrow ) Revisit Intention</td>
<td>1.178</td>
<td>6.722***</td>
<td>Supported</td>
</tr>
<tr>
<td>H7: Customer Satisfaction ( \rightarrow ) Word-Of-Mouth Intention</td>
<td>0.948</td>
<td>6.491***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Conclusions: The study revealed that perceived risk-taking is a significant predictor of menu choice, and menu choice moderates the relationship between risk taking and disconfirmation, which, in turn, has a significant influence on customer satisfaction. Meanwhile, disconfirmation acted as a full mediator on the relationship between menu choice and customer satisfaction. In addition, customer satisfaction had significant impacts on both revisit intention and word-of-mouth intention.

The most important contribution of this study was the inclusion of a menu choice process into the consumer behavior research framework. This empirical study explored factors that potentially influence customers’ menu choice in terms of familiarity and how this decision influences their satisfaction and intended loyalty in the authentic restaurant context. A total of seven hypotheses were identified and tested: five were supported (Hypotheses 1, 3, 5, 6, and 7) and two were not supported (Hypotheses 2 and 4). Findings revealed that perceived risk taking is a significant predictor of menu choice, and menu choice moderates the relationship between risk taking and disconfirmation, which, in turn, had a significant influence on customer satisfaction. Meanwhile, disconfirmation acted as a full mediator on the relationship between menu choice and customer satisfaction. In addition, customer satisfaction had significant impacts on both revisit intention and word-of-mouth intention.

In order to meet the wants and needs of customers, management needs to consider ways to control perceived risk when customer orders unfamiliar dishes. By doing so, management will be able to increase customers’ dining experience and to reduce customer’s disconfirmation, which will impact customer satisfaction and future behavior intention. When the customer is relieved from the cautiousness associated with ordering novel food, they may positively evaluate their dining experience. The findings suggest that it is necessary to educate customer
with knowledge of novel food. Customers may choose novel food to achieve a different dining experience. As Levav (2000) reported that consumers preferred unfamiliar wines in order to differentiate themselves when dining with a group. This could be useful to restaurant marketers on developing strategies to promote novel foods: such as, suggesting servers to introduce novel food to those customers in groups, provide novel food with pictures and beliefs from previous customers. Besides, offering free sample taste would help to promote the novel food.

The current study emphasized the importance of understanding the determinants and impacts of menu choice on consumer behavior intentions. In order to keep up with the fierce competition, offer quality food and diverse menu, especially novel food is critical to benefit the restaurant to become distinctiveness from competitors. The results will benefit the positive impact of unfamiliar/novel food choice on customer satisfaction and provides marketing strategies. The study has some limitations. Findings may not be generalized due to the limitation of convenient sample from one authentic Chinese restaurant. The proposed model may be extended and including personal characteristics. Expended survey would include more states and other authentic restaurants, the relationship among the constructs might be different.

REFERENCES


