

Kuan-Yu Chen¹

ASSESSING THE EFFECTS OF RESTAURANT-RELATED ATTRIBUTES ON CUSTOMER BEHAVIORAL INTENTIONS

This study analyzes the mediating effects of a perceived overall service quality and perceived value between restaurant-related attributes (servicescape, waiting experiences, and food quality) and customer behavioral intentions. Using the full-service restaurant diners' meal experiences as an illustration, the study proposes an integrated model of restaurant-related attributes, perceived overall service quality, perceived value and customer behavioral intentions. 396 full-service restaurant diners were interviewed. The findings support the model and show that perceived overall service quality and perceived value exert mediating effects on the relationship between restaurant-related attributes and customer behavioral intentions in the full-service restaurant setting. Discussions on applications of the findings and implications for future studies are provided.

Keywords: full-service restaurant; servicescape; waiting experiences; food quality; behavioral intentions.

Куан-Ю Чен

ОЦІНЮВАННЯ ВПЛИВУ ВІДМІННИХ РИС РЕСТОРАНУ НА НАМІР КЛІЄНТІВ ПОВЕРНУТИСЬ

У статті проаналізовано вплив сприйняття якості сервісу та сприйняття цінності клієнтом на залежність між відмінними рисами ресторану (сервісне середовище, час очікування та якість харчування) та наміром клієнтів повернутись до ресторану ще раз. Як практичний приклад розглянуто досвід клієнтів у повносервісних ресторанах, для чого було опитано 396 відвідувачів таких ресторанів. Побудовано модель залежностей, яка демонструє, що загальне сприйняття якості сервісу та сприйняття цінності впливають на взаємозалежність між відмінними рисами ресторану та наміром повернутись туди. Продемонстровано, яким чином висновки аналізу можуть бути застосовані на практиці, а також напрямки для подальших досліджень.

Ключові слова: повносервісний ресторан; сервісне середовище; час очікування надання послуги; якість харчування; поведінкові наміри.

Рис. 1. Табл. 2. Літ. 15.

Куан-Ю Чен

ОЦЕНКА ВЛИЯНИЯ ОТЛИЧИТЕЛЬНЫХ ЧЕРТ РЕСТОРАНА НА НАМЕРЕНИЕ КЛИЕНТОВ ВЕРНУТЬСЯ

В статье проанализировано влияние восприятия качества сервиса и восприятия ценности клиентом на зависимость между отличительными чертами ресторана (сервисная среда, время ожидания и качество пищи) и намерением клиентов вернуться в ресторан ещё раз. Как практический пример рассмотрен опыт клиентов в полносервисных ресторанах, для чего были опрошены 396 посетителей таких ресторанов. Построенная модель зависимостей демонстрирует, что общее восприятие качества сервиса и восприятие ценности влияют на взаимозависимость между отличительными чертами ресторана и намерением вернуться туда. Показано, каким образом выводы анализа можно применить на практике, а также направления для дальнейших исследований.

Ключевые слова: полносервисный ресторан; сервисная среда; время ожидание услуги; качество пищи; поведенческие намерения.

¹ Associate Professor, Department of Recreation Sport and Health Promotion, National Pingtung University of Science and Technology, Taiwan.

1. Introduction

Customer' future behavior intentions is an eclectic field involving dynamic interactions and exchanges (Mattila, 2004) and is better understood when analyzed via perceived value (Heskett, Sasser, and Schlesinger, 1997). Furthermore, although physical environment (servicescape), fairness of waiting time, good food, and good service are important factors affecting the customer service perceptions, how it influences customer service perceptions is yet to be clarified. According to these views, dining servicescape, waiting experiences and food quality may strongly enhance the value aspects of evaluation, where each party exchanges something of value to influence customer behavioral intentions.

In summary, despite a substantial amount of research investigating the effect of servicescape, waiting experience, and product quality, on customer behavior in the retail setting, little attention has been paid to the same factors but in the restaurant industry. In particular, the literature review identifies that servicescape, waiting experiences, product quality each has been studied separately but an integration of these constructs into a single model is rare for a full-service restaurant. Thus, the aim of this study is to investigate the effects of these constructs on behavioral intentions in the restaurant industry, to address the issue of relative importance of servicescape, waiting experience, and food quality. Furthermore, it is hypothesized that customer perceived value mediates the relationships of restaurant-related attributes with behavioral intentions. More specifically, the objectives of the study are to:

- 1) investigate the effect of dining servicescape on behavioral intentions through the overall service quality;
- 2) investigate the effect of waiting experiences on behavioral intentions through the overall service quality and perceived value;
- 3) investigate the effect of food quality on behavioral intentions through perceived value;
- 4) test the mediating role of perceived overall service quality and perceived value in the relationship between restaurant-related attributes (i.e., servicescape, waiting experience, food quality, and service quality) and behavioral intentions.

This study is unique in that this is the first attempt to integrally investigate the effect of servicescape, waiting experiences, and food quality on customer perceived value and subsequent behavioral intentions. This study would provide full-service restaurant operators a better understanding of customer's behavior, and assist them in mapping out their distinctive marketing strategies in order to achieve and maintain a superior competitive position in the industry.

2. Literature review

2.1. Servicescape. Servicescape is important to restaurant service providers for several reasons. First, it gives an outstanding chance to meet or exceed customer expectations in the overall service delivery processes. Second, it can create and enhance customer emotions. Third, setting may be a part of a service itself and help to create memorable experience (Lin, Ryan, Qu, Martin, 2010). There is a substantial amount of research investigating the effect of servicescape on customer quality perception (Baker et al., 1994), repatronage intentions (Spangenberg, Crowley, Henderson, 1996), customer decisions (Mitchell, Kahn, Knasko, 1995), customer experiences (Sherry, 1998). Based on the above literature, the following hypotheses are proposed:

Hypothesis 1. Servicescape of a full-service restaurant has a positive effect on customer perception of an overall service quality of a restaurant.

2.2. Waiting experiences. Customer waiting during consumption of a product or a service is sometimes inevitable. To customers, the length of waiting time is a non-monetary cost, which has negative effects on their value perception. Besides, the length of waiting time is a key factor affecting the customer service appraisal (Taylor, 1994), because service delays influence the customer evaluation of service performance and perception of the overall service quality (Zeithaml, Berry, Parasuraman, 1996). Therefore, if customers have a pleasant waiting experience, they will have less negative sentiment caused by a long wait or delay. As a result, the negative impact of waiting or delay on the overall service evaluation can be reduced, and the perceived value of a service can be increased. Based on the above discussion, the following hypotheses are formulated:

Hypothesis 2. Customer waiting experiences has a positive influence on their perception of an overall service quality.

Hypothesis 3. Customer waiting experiences has a positive influence on their value perceptions.

2.3. Food quality. Perceived value is a trade-off between perceived benefits and perceived costs (Lovelock, 2001). Kotler (1998) pointed out that a product can be categorized into 3 distinct but intercorrelated benefit levels: core benefits, tangible benefits and intangible benefits of a product. Core benefits are the fundamental benefits which a customer receives (Kotler, 1998). These relate to the actual outcomes or the core service as perceived by customers. In the restaurant setting, core benefits refer to the fundamental food quality of a restaurant (Heung and Ngai, 2008). Thus, the following hypothesis is developed:

Hypothesis 4. Food quality perceived by customers has a positive influence on customer value perceptions.

2.4. Relationships between perceived service quality, perceived value, and behavioral intentions. The mediating role of a perceived value has received little attention of marketing researchers, even though its role as an antecedent of other important constructs has been identified. Assessing the potential mediating effect of a perceived value might provide additional insight into research variables and customer behavioral intentions. For example, if the perceived value is found to mediate the relationship between service quality and behavioral intentions, restaurant managers would want to recognize that even the customer who has high perception of service quality calculates the cost/benefit ratio in his restaurant choice. Such a finding would indicate that restaurants' managers should not rely solely on service quality in an effort to increase the sale of dining. It would also be important to take into account the perceived value of a service/product by customers. Based on these theoretical foundations and empirical studies, this study proposed the following hypotheses:

Hypothesis 5. A perceived overall service quality positively influences a perceived value.

Hypothesis 6. A perceived overall service quality positively influences customer behavioral intentions.

Hypothesis 7. A perceived value positively influences customer behavioral intentions.

Hypothesis 8. A perceived overall service quality play a mediating role in the relationship between restaurant attributes and customer behavioral intentions.

Hypothesis 9. A perceived value play a mediating role in the relationship between restaurant attributes and customer behavioral intentions, perceived overall service quality and customer behavioral intentions.

Based on the review of the aforementioned studies, the hypothesized model (Figure 1) is proposed by the current study.

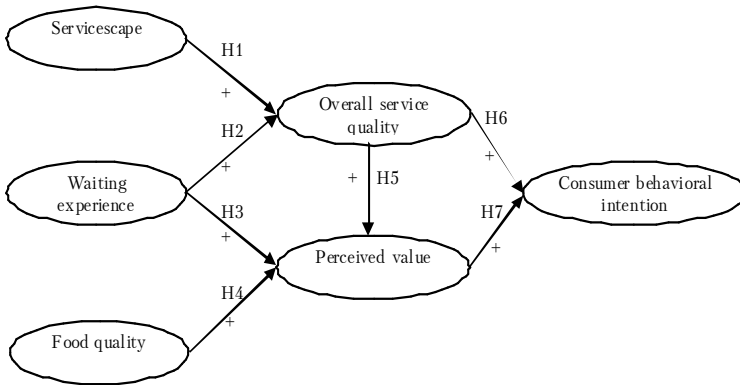


Figure 1. The hypothesized model, developed by the author

3. Sampling and data collection

Diners from 3 popular full-service restaurants were selected for the study. The selected restaurants provide the adequate level of service and quality food, but little differ in terms of quality attributes, so customers in each restaurant may experience different service, food, and physical environment. In addition, the restaurants are located in the areas where customers are easy to find an alternative if they wish. The target respondents included the diners who had their lunch and dinners in these 3 selected restaurants over the period of 4 weeks. The 4 weeks cover the typical business weeks for these restaurants. The selected respondents were interviewed face-to-face by trained interviewers using a convenience sampling approach. The service staff sought the respondents' agreement to an interview, and then the interviewer approached the respondents. Consequently, the total of 396 restaurant diners were interviewed, with approximately equal numbers selected from each of the 3 restaurants.

4. Results and analyses

4.1. Demographics of the respondents. Descriptive statistics data were calculated to ascertain the characteristics of the participants. Among the 396 valid respondents, females accounted for 52.5%. Males accounted for 47.5%. The age distribution was quite even, with 16.8% aged between 21 and 30, 26.4% – between 31 and 40 years, and 25.6% – between 41 and 50 years. The majority of the participants possessed at least a bachelor's degree (66.8%). In addition, approximately 64.2% of the respondents indicated that they had visited the restaurant more than 3 times over the past 3 months, 38.5% had visited more than 6 times, and only 4.6% indicated that this had been their first visit. Further, more than half (63.4%) of the respondents had a monthly personal income above TWD \$30,000 (< US \$1000).

4.2. Hypothesis testing. Table 1 presents the path coefficients and each construct's critical ratio (C.R.; t-value). The parameter estimates indicated that dining servicescape significantly influenced ($\beta = 0.47$, $t = 8.77$) perceived overall service quality. Thus, Hypothesis 1 is supported. These results were consistent with Hightower et al. (2002), who claimed that the servicescape is a significant predictor of a perceived overall service quality.

Table 1. Structural parameter estimates, calculated by the author

Hypothesized path	Standardized path coefficient	t-Value	Results
H1: servicescape > perceived overall service quality	0.47***	8.77	Supported
H2: waiting experiences > perceived overall service quality	0.38***	8.00	Supported
H3: waiting experiences > perceived value	0.19***	4.26	Supported
H4: Food quality > perceived value	0.51***	12.50	Supported
H5: Perceived overall service quality > perceived value	0.32***	7.24	Supported
H6: perceived overall service quality > behavioral intentions	0.24***	3.82	Supported
H7: Perceived value > behavioral intentions	0.37***	6.08	Supported

$\chi^2_{(396)} = 280.33$ ($p = 0.00$), $\chi^2/df = 1.27$, $GFI = 0.94$, $AGFI = 0.93$, $NFI = 0.97$, $CFI = 0.99$, $NNFI = 0.99$, $SRMR = 0.03$, $RMSEA = 0.03$

Note ***: $p < 0.001$.

Hypotheses 2 and 3 were both supported by the analysis, signifying that waiting experience is the key determinant of the perceived overall service quality and the perceived value. The parameter estimate for the path from waiting experiences to the perceived overall service quality was 0.38, and to the perceived value – 0.19. This indicated that waiting experiences had a direct impact on both perceived overall service quality and perceived value in full-service restaurants, with perceived overall service quality showing a stronger effect than perceived value. This result is partially consistent with Hightower et al. (2002) research, which claimed that waiting experience has significant indirect effect on perceived value through the perceived overall service quality.

Hypothesis 4, predicting a positive relationship between food quality and perceived value, is also supported. The result indicates that food quality had direct effects on the perceived value ($\beta = 0.51$, $t = 12.50$). A perceived value is the most important factor affecting customer behavioral intentions (total effect = 0.37), and food quality is the most essential factor affecting perceived value (total effect = 0.51). Thus, food quality is the most important predictor of customer behavior among the 3 restaurant attributes (servicescape, waiting experiences, and food quality). Its total effect on customer behavioral intentions (via perceived value) reaches 0.19. Although some of the restaurant attributes, such as servicescape or waiting experience, influence the customer perceived overall service quality and perceived value, the effect of these attributes on customer behavioral intentions is less than food quality. This was not surprising, since no one really decided to go back to a restaurant again and again just because the waiting experience was satisfaction or the dining area had an acceptable interior design.

Hypotheses 5 and 6 proposed a positive relationship which perceived overall service quality linked with perceived value and behavioral intentions, both

hypotheses were supported in the study. However, the magnitude of a direct effect is different between a perceived value and behavioral intentions, A larger β value for the causal path from perceived overall service quality to perceived value ($\beta = 0.32, t = 7.24$) than for the path from a perceived overall service quality to customer behavioral intentions ($\beta = 0.24, t = 3.28$) indicated that the perceived overall service quality is more influential on the perceived value than on customer behavioral intentions.

Hypothesis 7, which linked the perceived value with customer behavioral intentions, was also supported. Based on the parameter estimate, the perceived value showed a strong impact on customer behavioral intentions ($\beta = 0.37, t = 6.08$). Compared with the perceived overall service quality, perceived value is a more important predictor of behavioral intentions.

Table 2. Indirect effects of constructs on behavioral intentions through a perceived overall service quality and perceived value, calculated by the author

Indirect effect	Value	se	LL 95%CI	UL 95%CI	Z	Sig. (two)
perceived overall service quality as mediator						
servicescape > behavioral intentions	0.2533	0.0423	0.1704	0.3362	5.9862	0.0000
waiting experiences > behavioral intentions	0.2010	0.0341	0.1342	0.2679	5.8916	0.0000
perceived value as mediator						
servicescape > behavioral intentions	0.2526	0.0380	0.1781	0.3271	6.6462	0.0000
waiting experiences > behavioral intentions	0.2505	0.0364	0.1792	0.3218	6.8870	0.0000
food quality > behavioral intentions	0.2654	0.0429	0.1814	0.3495	6.1892	0.0000
perceived overall service quality > behavioral intentions	0.2241	0.0374	0.1509	0.2973	5.9979	0.0000

4.3. The mediating role of the perceived overall service quality and perceived value

For the actual mediation analyses, indirect effects are estimated with Sobel's method using the SPSS-macro provided by Preacher and Hayes (2004). This approach to mediation analysis is stated to be more accurate than traditional mediation analysis approaches (e.g., MacKinnon, Lockwood, Hoffman, West, and Sheets, 2002). Sobel test presents the level of significance of the indirect effect of the independent variable on the dependent variable through a mediator (Yuksel, Yuksel, and Bilim, 2010). The SPSS-macro provides an estimate of true indirect effects and its bias-corrected 95% confidence interval (Sobel test scores, Z values and probability values are given in Table 2). The Sobel test (Table 2) revealed that both the perceived overall service quality and perceived value significantly mediated the effect of servicescape, waiting experiences, food quality on behavioral intentions. Thus, Hypotheses 8 and 9 are both supported.

5. Conclusion

This study attempted to understand the role of restaurant-related attributes (servicescape, waiting experience and food quality) in customer perceived overall service quality, perceived value, and post-dining behavioral intentions and the role of perceived overall service quality/perceived value in mediating the relationship between restaurant-related attributes and customer behavioral intentions in the full-service restaurant setting. This study provided both theoretical and managerial implications. The outcomes of the study are as follows:

1) The servicescape influenced the perceived overall service quality, which in turn could be a predictor of both perceived value and customer behavioral intentions. Both the perceived overall service quality and perceived value mediated the relationship between servicescape and customer behavioral intentions.

2) Waiting experiences influenced both the perceived overall service quality and perceived value, which in turn could be a predictor of customer behavioral intentions. Both the perceived overall service quality and perceived value mediated the relationship between waiting experiences and customer behavioral intentions.

3) Food quality influenced the perceived value, which in turn could be a predictor of customer behavioral intentions. The perceived value mediated the relationship between food quality and customer behavioral intentions.

4) The perceived value also acts as a mediator between the perceived overall service quality and customer behavioral intentions.

References:

- Baker, J., Grewal, D., Parasuraman, A.* (1994). The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science*, 22(4): 328–339.
- Heskett, J.L., Sasser, W.E., Schlesinger, L.A.* (1997). *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. Free Press, New York.
- Heung, V.C.S., Ngai, E.W.T.* (2008). The mediating effects of perceived value and customer satisfaction on customer loyalty in the Chinese restaurant setting. *Journal of Quality Assurance in Hospitality & Tourism*, 9(2): 85–107.
- Kotler, P.* (1998). *Marketing management: analysis, planning, implementation, and control*. Prentice-Hall, Englewood Cliffs, NJ.
- Lin, S., Ryan, B., Qu, H., Martin, L.* (2010). A Study of the relationship between hotel informative service setting items and customer satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 11(2): 111–131.
- Lovelock, C.H.* (2001). *Service marketing: People, technology, strategy* (4th ed.). Prentice Hall International Editions, New Jersey.
- MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G., Sheets, V.* (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7: 83–104.
- Mattila, A.S.* (2004). Consumer behavior research in hospitality and tourism journals. *International Journal of Hospitality Management*, 23(5): 449–457.
- Mitchell, D.J., Kahn, B.E., Knashko, S.C.* (1995). There's something in the air: Effects of congruent or incongruent ambient odor on consumer decision making. *Journal of Consumer Research*, 22(2): 229–238.
- Preacher, K.J., Hayes, A.F.* (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36: 717–731.
- Sherry Jr., J.F.* (1998). *Servicescapes: The concept of place in contemporary markets*. NTC/Contemporary Publishing Company, Chicago.
- Spangenberg, E.R., Crowley, A.E., Henderson, P.W.* (1996). Improving the store environment: Do olfactory cues affect evaluations and behaviors. *Journal of Marketing*, 60(2): 67–80.
- Taylor, S.* (1994). Waiting for service: the relationship between delays and evaluations of service. *Journal of Marketing*, 58(2): 55–69.
- Yuksel, A., Yuksel, F., Bilim, Y.* (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management*, 31(2): 274–284.
- Zeithaml, V.A., Berry, L.L., Parasuraman, A.* (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2): 31–46.

Стаття надійшла до редакції 22.06.2013.