# Measuring the Mediating Role of Dining Experience Attributes on Customer Satisfaction and Its Impact on Behavioral Intentions of Casual Dining Restaurant in Jakarta

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*Abstract*—**The purpose of this study was to investigate the role of dining experience attributes on customer satisfaction on behavioral intentions in casual dining restaurant in Jakarta. Based on a sample of 213 customers, which analyze with multiple regression approach, this study revealed that: (1) dining experience attributes (food quality, service quality and physical environment) positively influences on customer satisfaction, (2) service quality was found as the most important factor in dining experience attributes that affecting customer satisfaction, and (3) customer satisfaction positively influences on behavioral intentions.**

*Index Terms*—**Dining experience, customer satisfaction, behavioral intentions, casual dining restaurant.**

## I. INTRODUCTION

Every restaurant must find ways to retain and attract new customers, where at the same time restaurant should remain competitive and profitable. Its no longer surprising that nowadays for some reasons many consumers are more ingenious to seek a restaurant where not just only offer a variant unique menu with a reasonable price but also offer a great experience beneath on its atmosphere of physical environment and warm services. A new concept of restaurant business, which combined the development of full service and fast food restaurant operation or commonly known as casual dining restaurant are type of a restaurant, which designed to attract middle-income customers who enjoy dining out [1] with a casual ambience, excellence in its foods as well as professional and attentive employee-customers approach [2], [3].

As the result, a new concept of new casual dining restaurant establishment is more vary and operate it chains internationally, thus the key sustainable of competitive advantage rely on the ability of restaurant in delivering a comprehensive and memorable dining experience to the customers is become more important than before. Dining experience was includes customer's judgment on their overall experience, started with the quality of food and service to the restaurant environment [4], [5]. Therefore, by understanding what attributes of casual dining restaurant that suppose to satisfied the customers and lead them to preform behavioral intentions such as, revisit, say positive thing and recommend the restaurant to others become essential for casual dining restaurateurs. On that basis, the objective of this study was to: (1) investigate the relationship of dining experience attributes on customer satisfaction; and (2) investigate customer satisfaction on behavioral intentions in the casual dining restaurant in Jakarta is applicable.

## II. THEORETICAL BACKGROUND AND HYPOTHESES

### A. Dining Experience Attributes on Customer Satisfaction

Over past few decades, researchers have recently discussed the link between customer satisfaction and dining experiences attributes, which enhance the overall customer satisfaction. Based on prior research on various type of restaurant, revealed three common attributes for measuring dining experience, which are food quality and physical environment as the tangible aspects, where service quality was recognized as the intangible aspects in restaurant business [4]-[6]. Food quality was simply defined as being appropriate to consumption [7], [8] and it encompasses quality factors such as food temperature, food freshness and food preparation [4], [9], [10]. Meanwhile, it's not arguably that service quality and customer satisfaction are inseparable factors in marketing factors, particularly in restaurant industry. Despite, food as the core product of restaurant business, service quality becomes a major concern in hospitality industry, since these industries principally dealing with people-oriented service delivery.

Service quality is originated from the employee-customer interaction through restaurant's ability to serve the promised service dependably and accurately, employees' caring and attention to every customers, employee's knowledge, courtesy and ability to inspire trust and confidence as well as employee's professional appearance were empirically significant on generate customers satisfaction [5], [11]. Aside from restaurant's food and service quality aspects, it is believed that the physical environment help to form customers' dining experiences at restaurants business and positively influence in forming customer satisfaction [4], [12]. Thus physical environment factors, which includes restaurant's function, space, design color and lightning as one of the important stimulus during dining experience [13], [14]. Based on the literature discussion above, the following hypotheses were deducted:

**Hypothesis 1:** Dining experience attributes positively influences on customer satisfaction

### B. Customer Satisfaction on Behavioral Intentions

*Customer satisfaction* is crucial to the existence of any business. Customer satisfaction is deemed as determinant of post-purchase attitude and reflects as a positive or negative

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outcome, which derived from consumer personal experiences. In advanced, customer satisfaction was also discovered as the best form to lead behavioral intentions, which noted as the most effective way of company's advertisement [15], [16]. Reasoned-action theory by Fishbein and Ajzen in late the 70's noted that a behavioral intention is designed to represent the effect of attitudes and subjective norms on behavioral intentions [17]. The degree to which a person has expressed conscious plans to perform or not perform some specified future behavior is often called behavioral intentions [18].

A numerous research on restaurant industry determined applicable proxies of behavioral intentions as the impact of customer satisfaction. Empirical research on quick-casual restaurant in U.S. was explained behavioral intentions as the possibility of customers' to revisit and recommend the restaurant to the others [5]. While, research on upscale Korean restaurant in Seoul, simply added another behavioral intentions proxy, such as visit more frequently [6]. Additionally, the empirical investigation at the various type of restaurant, such as casual dining Chinese restaurant [4], mid-to-upper scale restaurant in U.S. [13] and Korean restaurant in U.S. [19] used the same proxies of behavioral intentions such as recommend to others, say positive thing and revisit the restaurant in the future. Thus, it can be hypothesized that:

**Hypothesis 2:** Customer satisfaction positively influences on behavioral intentions

Therefore, based on the theoretical background abovementioned, Fig. 1 below displays the conceptual model of the relationship among quality of food quality, service quality, physical environment, customer satisfaction and behavioral intentions.
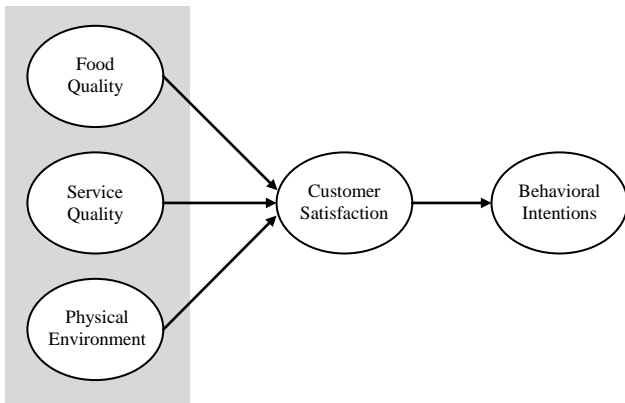


Fig. 1. Conceptual model of the relationships among study variables.

## III. RESEARCH MODEL

### A. Measurement

As presented in Table II, dining experiences attribute includes food quality, service quality and physical environment were slightly adopted to be applicable with casual dining restaurants section from previous research in numerous restaurant studies [4], [5], [13], [19], [20]. Items on Customer satisfaction were measured with three items of perceived disconfirmation theory by Oliver [21], which the items are modified from the similar studies in the restaurant industry [4], [13] to properly fit with the restaurant situations. Lastly, behavioral intentions were measured using three items based on study from Zeithaml *et al*. [15], which has

been adjusted with the similar study on the several types of restaurant [5], [13]. All the items in this study were measured on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

### B. Sample

The questionnaires were distributed in 2 well-known casual dining restaurants in South Jakarta. A convenience sampling method was utilized to collect data. The questionnaires were randomly distributed in each restaurant in the exit door after the customers finish their payments session. Hence, this study could expose the entire dining experience, satisfaction and their post dining behavior at an aggregate level. A total 250 questionnaires were distributed and total of 213 were completed the questionnaires and used in this study.

## IV. RESULTS

### A. Respondent's Profile

TABLE I: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

| Characteristics | Frequency | Percentage (n=213) |
|---|---|---|
| *Gender* | | |
| Male | 123 | 57.7 |
| Female | 90 | 42.3 |
| Total | 213 | 100 |
| *Age* | | |
| 17 – 21 | 70 | 32.9 |
| 22 – 26 | 79 | 37.1 |
| 27 – 31 | 25 | 11.7 |
| Above 31 | 39 | 18.3 |
| Total | 213 | 100 |
| *Occupation* | | |
| Student | 100 | 46.9 |
| Professional | 59 | 27.7 |
| Government officer | 19 | 8.9 |
| Entrepreneur | 18 | 8.5 |
| Others | 17 | 8.0 |
| Total | 213 | 100 |
| *Monthly Income (Rp)* | | |
| < 1 million | 42 | 19.7 |
| 1 million – 3 million | 52 | 24.4 |
| 3 million – 5 million | 65 | 30.5 |
| 5 million – 10 million | 43 | 20.2 |
| > 10 million | 11 | 5.2 |
| Total | 213 | 100 |
| *Dining Companion* | | |
| Alone | 11 | 5.2 |
| Family (spouse, parents or children) | 50 | 23.5 |
| Friends | 75 | 35.2 |
| Business colleagues | 19 | 8.9 |
| Couples | 58 | 27.2 |
| Total | 213 | 100 |

Table I reports the respondents' profile characteristics. In a brief, result of frequency analysis on respondent's demographic profile highlighted that among the 213 valid respondents are contained slightly more males (57.7%) than females (42.3%). Majority the age of the respondents was 22-26 years (37.1%). With regard of occupational status, the majority of respondents were students (46.9%), followed by professionals (27.7%) and other occupation, such as lawyer and sales promotion girl (25%). Regarding the average monthly income, 31 % of the respondents were having the monthly income between 3 – 5 million (Rp) in a month. Respondents were most likely to go to a casual dining restaurant with their friends (35.2%), followed by couples (27.2%) and family (23.5%). However, respondents are less likely to dine out with business colleagues (8.9%) and/or by themselves (5.2%).

TABLE II: MEASUREMENT ITEMS AND DESCRIPTIVE ANALYSIS

| Construct | Measurement Items | Label | Mean | SD |
|---|---|---|---|---|
| Dining Experience | *Food Quality* | | | |
| | The restaurant served tasty food | FQ-1 | 3.7 | 0.9 |
| | The food presentation is visually appealing | FQ-2 | 4.0 | 0.9 |
| | The food was served at the appropriate temperature | FQ-3 | 3.8 | 0.9 |
| | The restaurant served fresh food | FQ-4 | 3.6 | 0.9 |
| | *Service Quality* | | | |
| | The restaurant served my food exactly as I order it | SQ-1 | 3.7 | 0.9 |
| | The restaurant employees are always willing to help me | SQ-2 | 3.9 | 1.0 |
| | The behavior of the employees instills confidence in me | SQ-3 | 3.7 | 0.9 |
| | The restaurant employees were neat and well dressed | SQ-4 | 3.8 | 0.9 |
| | *Physical Environment* | | | |
| | The facility layout allows me to move around easily | PE-1 | 3.9 | 0.9 |
| | The interior design is visually attractive | PE-2 | 3.7 | 1.0 |
| | The restaurant used colors that create a sense of pleasant ambience | PE-3 | 4.0 | 0.8 |
| | Lightning create a comfortable atmosphere | PE-4 | 3.5 | 0.9 |
| Customer Satisfaction | I am satisfied with this restaurant | CS-1 | 3.9 | 0.9 |
| | I am pleased to have visited this restaurant | CS-2 | 3.8 | 0.9 |
| | I really enjoyed myself at this restaurant | CS-3 | 4.0 | 1.0 |
| Behavioral Intentions | I would like to come back to this restaurant in the future | BI-1 | 4.1 | 0.8 |
| | I would recommend this restaurant to my friends or others | BI-2 | 3.9 | 0.9 |
| | I would say positive things about this restaurant to others | BI-3 | 4.1 | 0.9 |

## B. Data Quality Testing

Table III presents the results of both validity and reliability test from all the measurement items constructs. Factor analysis was conducted to identify the validity of the measurement items. The results of validity test from 213 respondents are indicating the convergent validity of the measurement model (0.702 and 0.866), since all the measurement items had a standardized loading ranging from 0.40 or greater [22]. Furthermore, all scales were shows sufficient reliability and adequate to assess the research hypotheses. The result of the reliability test indicates the measurement items had a high internal consistency with alpha ranging from 0.856 and 0.879 and exceed from reliability guidelines of 0.6 [23].

TABLE III: RELIABILITY AND VALIDITY MEASURES

| Constructs | Measurement Items | Loadings | Cronbach α |
|---|---|---|---|
| Dining Experience | FQ-1 | 0.838 | 0.874 |
| | FQ-2 | 0.827 | |
| | FQ-3 | 0.824 | |
| | FQ-4 | 0.748 | |
| | SQ-1 | 0.764 | |
| | SQ-2 | 0.744 | |
| | SQ-3 | 0.784 | |
| | SQ-4 | 0.808 | |
| | PE-1 | 0.824 | |
| | PE-2 | 0.753 | |
| | PE-3 | 0.866 | |
| | PE-4 | 0.827 | |
| Customer Satisfaction | CS-1 | 0.747 | 0.856 |
| | CS-2 | 0.702 | |
| | CS-3 | 0.805 | |
| Future Behavioral Intentions | FB-1 | 0.834 | 0.879 |
| | FB-2 | 0.779 | |
| | FB-3 | 0.795 | |

## C. Regression Analysis and Hypotheses Testing

The objective of this study was to examine the relationship between dining experience attributes on satisfaction and behavioral intentions in casual dining restaurant. As presented in Table IV, two regression equations were suggested to test the hypotheses of this study. The first equation included the regression analysis to investigate the direct effect of three variables of dining experience on customers' satisfaction. The second equation was established to examine the direct effect of customers' satisfaction on future behavioral intentions.

As seen in Table V, the first regression equation revealed that all the three attributes of dining experience, namely food quality (FQ), service quality (SQ) and physical environment (PE) were significant at $R^2$ of .431. The overall model was significant ranging from 0.000 and 0.002 with the $p$-value $<$ 0.05. Hence, dining experience has a significant influence on customer satisfaction by .431 (43.1 percent), where the remaining .569 (56.9 percent) were defined by other factors that not mentioned in this study. Therefore, Hypotheses 1, which stated: "dining experience attributes positively influences on customer satisfaction" was accepted. The results also indicate service quality was the most important attributes on dining experience to customer satisfaction ($\beta_2$SQ = .358, $t$ = 3.093), since it result was proven the highest compare than other dining experience attributes, food quality ($\beta_1$FQ = .334, $t$ = 4.882) and follow with physical environment ($\beta_3$PE = .320, $t$ = 4.614). In the second regression equation as presented in Table II below, the influence of customer satisfaction on behavioral intentions was significant at $R^2$ of .674. The overall model was significant at 0.000 with the $p$-value $<$ 0.05. Customer satisfaction explained about .536 (53.6 percent) of the total variance in future behavioral intentions. Therefore, the hypotheses 2, which stated: "customer satisfaction positively influences on behavioral intentions" was accepted.

## V. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

This study has identified the dining experience attributes and its influence on customer satisfaction and behavioral intentions. The results were also explicitly described the role of each dining experience attributes separately on its influences on customer satisfaction. Consistent with the previous research, dining experience is one of the important factors that relate to customers judgment by comparing customers expectation on restaurant tangible products (food

quality and physical environment) and intangible product (service quality in regard of employee-customers interaction) with the actual performance of restaurant [5], [20]. Dining experience is essentials for restaurateur to understand, since it's central role in restaurant business is undeniably lead a positive customer satisfaction as well as a great predictor for future behavioral intentions [4]-[6],

TABLE IV: REGRESSION EQUATION MODEL

| Equation | Hypotheses | Regression |
|---|---|---|
| Equation 1 | H$_1$: Dining experience attributes positively influences on customer satisfaction | $CS = \alpha + \beta_1 FQ + \beta_2 SQ + \beta_3 PE$ |
| Equation 2 | H$_2$: Customer satisfaction positively influences on behavioral intentions | $BI = \alpha + \beta_1 CS$ |

CS = Customer Satisfaction, $\alpha$ = Intercept term, $\beta$ = Regression coefficient, FQ = Food quality, SQ = Service quality, PE = Physical environment, FB = Behavioral intentions

TABLE V: REGRESSION ANALYSIS RESULTS

| Equation | Path | $\beta$ | $t$-value | $p$-value | $R^2$ |
|---|---|---|---|---|---|
| Equation 1 | Food quality → Customer satisfaction | .334 | 4.882 | .000 | .431 |
|  | Service quality → Customer Satisfaction | .358 | 3.093 | .002 |  |
|  | Physical environment → Customer satisfaction | .320 | 4.614 | .000 |  |
| Equation 2 | Customer satisfaction → behavioral intentions | .536 | 9.825 | .000 | .674 |

This [9] also result revealed that service quality was recognized as the most important attributes in dining experience. Service quality in casual dining restaurant is important as food as the main product in the restaurant industry. Restaurant is not only emphasizing food, but also sell the service delivery of the employees as well. Employee's professional behavior, such as employee's competence and skills in presenting friendly and helpful attitude during service delivery are considered very important in the kind of casual dining restaurant type. Moreover, some critical improvements need to be focused in regard of food quality and physical environment. Food quality is the main product of restaurant industry. Therefore, restaurant must consistently and dependably represent the food with quality in regard of appropriate freshness, temperature, taste, and appealing presentation. Meanwhile, relating with the literature review of the physical environment, it is important for restaurateurs to differentiate the restaurant business through restaurant's physical environment to establish a memorable experience with a casual and relaxed atmosphere.

The physical environment not only just to keep current restaurant's customers but also a useful factor to attract the new customers, since in a kind of casual dining restaurant type some customers is spotlight on the pleasant and innovative environment rather than food or service itself. Some improvement on the arrangement of interior decoration, proper lighting and colors might help to generate an excellence customers' dining experiences as well as trigger the customer satisfaction and influence in positive post-purchase stage on behavioral intentions. However to understand the attributes of dining experience and the relationship between satisfaction and behavioral intentions, further analysis of the material would be necessary.

## REFERENCES

[1] M. C. Spears, and M. B. Gregoire, *Foodservice Organizations: A Managerial and System Approach*, 6th ed., New Jersey: Prentice Hall, 2006.
[2] T. Powers, and C. W. Barrows, *Introduction to Management in the Hospitality Industry*, 7th ed. New York: John Wiley, 2003.
[3] P. R. Dittmer, *Dimensions of the Hospitality Industry*, 3rd ed. New York: John Wiley, 2002.
[4] Y. Liu and S. Jang, "Perceptions of Chinese Restaurants in the U.S.: What Affects Customer Satisfaction and Behavioral Intentions?" *International Journal of Hospitality Management*, vol. 28, pp. 338-348, 2009.
[5] K. Ryu and H. Han, "The Influence of the Quality of Food, Service, and Physical Environment on Customer Satisfaction and Behavioral Intention in Quick-Casual Restaurants: Moderating Role of Perceived Price," *Journal of Hospitality & Tourism Research,* vol. 34, no. 3, pp. 310-329, 2010.
[6] K. Ryu, H. Lee, and W. Kim, "The Influence of the Quality of the Physical Environment, Food and Service on Restaurant Image, Customer Perceived Value, Customer Satisfaction and Behavioral Intentions," *The International Journal of Contemporary Hospitality Management*, vol. 24, no. 2, pp. 200-223, 2012.
[7] M. Haghighi, A. Dorosti, A. Rahnama, and A. Hoseinpour, "Evaluation of Factors Affecting Customer Loyalty in The Restaurant Industry," *African Journal of Business Management*, vol. 6, no. 14, pp. 5039-5046, 2012.
[8] C. Peri, "The Universe of Food Quality," *The First European Conference on Sensory Science of Food and Beverages: A Sense of Identity*, vol. 17, no. 1-2, pp. 3-8, 2006.
[9] Y. Namkung and S. Jang, S, "Does Food Quality Really Matter in Restaurants? Its Impact On Customer Satisfaction and Behavioral Intentions," *Journal of Hospitality and Tourism Research*, vol. 31, no. 3, pp. 387-409, 2007.
[10] W. G. K. Kim, C. Y. N. Ng, and Y. Kim, "Influence of Institutional DINESERV on Customer Satisfaction, Return Intention and Word-of-Mouth," *International Journal of Hospitality Management*, vol. 28, no. 1, pp.10-17, 2006.
[11] K. Ryu and S. Jang, "DINESCAPE: A Scale for Customers' Perception of Dining Environments," *Journal of Foodservice Business Research*, vol. 11, no. 1, pp. 2-22, 2008.
[12] E. Wall and L. Berry, "The Combined Effects of the Physical Environment and Employee Behaviour on Customer Perception of Restaurant Service Quality," *Cornell Hotel and Restaurant Administration Quarterly,* vol. 48, no. 1, pp. 59-69, 2007.
[13] S. Jang and Y. Namkung, "Perceived Quality, Emotions and Behavioral Intentions: Application of An Extended Mehrabian – Russell Model To Restaurant," *Journal of Business Research*, vol. 62, pp. 451-460, 2009.
[14] I. Y. Lin, "Evaluating a Servicescape: the Effect of Cognition and Emotion," *Journal of Hospitality Management*, vol. 23, pp. 163-178, 2004.
[15] V. A. Zeithaml, L. L. Berry, and A. Parasuraman, "The Behavioral Consequences of Service Quality," *Journal of Marketing*, vol. 60, pp. 31-46, 1996.
[16] D. A. Baker and J. L. Crompton, "Quality, Satisfaction and Behavioral Intentions," *Annals of Tourism Research*, vol. 27, no. 3, pp. 785-804, 2000.
[17] M. Fishbein, and I. Ajzen, *Belief, Attitude, Intention, and Behavior: An Introduction To theory and Research*, Reading, MA: Addison-Wesley, 1975.
[18] J. Jaccard and G. W. King, "A Probabilistic Model of the Relationship Between Beliefs and Behavioral Intentions," *Human Communication Research*, vol. 3, pp. 332-342, 1977.
[19] J. Ha and S. Jang, "Effects of Service Quality and Food Quality: The Moderating Role of Atmospherics in an Ethnic Restaurant Segment," *International Journal of Hospitality*, vol. 29, pp. 520-529, 2010.

[20] E. Jeong and S. Jang, "Restaurant Experiences Triggering Positive Electronic Word-of-Mouth (eWOM) Motivations," *Journal of Hospitality Management*, vol. 30, no. 2, pp. 356-366, 2011.

[21] R. L. Oliver, "A Cognitive Model for the Antecedents and Consequences of Satisfaction," *Journal of Marketing Research*, vol. 17, pp. 460-469, 1980.

[22] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate Data Analysis*, 7th ed., New Jersey: Pearson Education Inc, pp. 116-117, 2010.

[23] U. Sekaran and R. Bougie, *Research Methods for Business: A Skill Building Approach*, 5th ed., West Sussex: John Wiley & Sons, Inc, pp. 158-165, 2009.

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