The underlying factors affecting consumers’ behavioral intentions in foodservice business in Surabaya, Indonesia

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ABSTRACT: Food service business in Surabaya has experienced a significant growth. As such, it is essential for the management to take into account factors that influence consumers’ behavioral intentions. The overarching aim of this study was to investigate the effect of three major dining experience aspects, namely food quality, service quality, and physical dining environment on consumer perceived value and behavioral intentions. In total, 3096 samples were approached at 25 restaurants and cafes to participate in the questionnaire-based survey. The result showed that the quality of food was found to be the major antecedent that significantly influenced consumer perceived value when they went dining-out at the restaurants and cafes. Further, consumer perceived value was proven to have a positive significant effect on consumers’ behavioral intentions.

Keywords: food quality, service quality, physical dining environment, behavioral intentions, restaurants

1 INTRODUCTION

As lifestyles change, we are witnessing the increasing number of dining out activities. Consumers see eating out is not only to fulfill basic physiological need, but also to build social relationships and satisfy self-esteem needs such as enjoyment and pleasure representing a modern lifestyle. Restaurants, cafes, and other foodservice establishments have become favorite places for consumers to do both social and business activities. Surabaya as the second largest city in Indonesia has strengthened its position as the centre of business and commerce after the capital city, Jakarta. In 2014, the data of the Bureau of Statistics of Indonesia indicated that with the growth of 6.14%, foodservice sub-sector had contributed 12.96% to the total Gross Domestic Regional Product (GDRP) of Surabaya (BPS, 2015). In terms of the number of foodservice establishments, data of the Association of Restaurant and Cafe Business Operators (APKRINDO) has recorded that in Surabaya in 2014, there were 500–600 restaurants and cafes operated targeting medium upscale segments and about 2000 foodservice business operators that focused on catering to medium lower market (Jat, 2015).

Given those facts, consumers are benefited as they have more dining place alternatives to choose for eating-out, thus, giving consumers more bargaining power. On the other hand, the increasing number of foodservice establishments has inevitably created more intense competition among business players in the industry. In response to the higher competition pressure and the dynamic market preferences, each foodservice business operators must find ways to attract new and retain existing customers. The provision of good food quality that is combined with excellent quality of service, delivered at a nice physical dining environment has become more important than before. The success of foodservice business will depend on the ability of management to provide a great dining experience whose value is positively perceived by consumers, which in turn, would make them become loyal to the company.

Having said that, an understanding of what aspects of dining experience that determine consumer perceived value and behavioral intentions becomes crucial. In the context of foodservice industry in Surabaya, to the author’s knowledge, very few studies conducted to discover how perceived value along with the aforementioned three dining experience factors affect consumers’ behavioral intention to revisit the same foodservice outlet in Surabaya. On that basis, the purpose of this study therefore was to investigate the influence of food quality, service quality, and physical dining environment on behavioral intentions throughout the mediating effect of consumer perceived value. The result of this study was intended to give a clearer understanding of the factors influencing the consumers in choosing food service business such as restaurants and cafes. This will be very
much beneficial for the management or owners to develop the most effective marketing and operational strategies for improving their products and services to the consumers.

2 LITERATURE REVIEW

Numerous consumer behavior studies in foodservice business context have predominantly focused on three major aspects, namely: the quality of food, the quality of service, and the physical dining environment (Ryu and Han, 2010; Ryu et al., 2012).

Food quality has been widely recognized as a basic element of the overall dining experience. The literature has shown a broad range of attributes measuring food quality. These vary from food presentation or appearance, taste, food health-related characteristics, food quantity and variety (Ha and Jang, 2010; Jang et al., 2009; Namkung and Jang, 2007; Ryu and Han, 2010). Extensive research has been devoted to examining the relationship between food quality and consumer behavior constructs such as satisfaction, behavioral intention, and loyalty. Many researchers have revealed that the quality of food is a significant predictor of behavioral intention (Ha and Jang, 2010; Haghighi et al., 2012; Ryu and Han, 2010; Namkung and Jang, 2007; Sulek and Hensley, 2004). Based on the above discussion, the following hypothesis was proposed:

Hypothesis 1: Food quality has a positive significant influence on consumer perceived value.

In addition to food quality, service quality also appears to be the major element in influencing the overall dining experiences. Service quality is more about measuring the subjective perceptions of customers. Zeithaml and Bitner (2002) defined service quality as the customer's judgment of the overall excellence or superiority of the service. Parasuraman et al. (1988) developed a “Service Quality” (SERVQUAL) instrument to measure service quality that comprises five dimensions: reliability, responsiveness, empathy, assurance, and tangibles. Since then, various researchers have developed a measurement scale of service quality in the context of food service. Stevens et al.'s (1995) ‘Dining Service’ (DINESERV) models the most commonly adopted to examine customer perceptions of restaurant service quality (Markovic et al., 2010). The first element of DINESERV is tangibles, which relates to a restaurant's physical design. Reliability involves the freshness and temperature of the food, accurate billing, and receiving the food that has been ordered. Next is responsiveness, which refers to staff assistance with the menu or wine list or appropriate and prompt responses to customer needs and requests. Assurance is the fourth element of DINESERV, which is described as the ability of restaurant staff to build customer trust, ensuring them that the food is safe and that good service will be provided. Finally, empathy refers to an ability to provide personalized attention to customers by anticipating special requirements or by being sympathetic towards customer problems. Service quality is viewed as key predictor of satisfaction which lead to consumers' behavioral intentions (Chow et al., 2007; Keith and Simmers, 2011). The foregoing discussion has led the following hypothesis:

Hypothesis 2: Service quality has a positive significant influence on consumer perceived value.

Following the discussions of food quality and service quality factors, the contribution of physical dining environment to affect dining experience has been recognized by researchers (Sulek and Hensley, 2004; Wall and Berry, 2007; Ha and Jang, 2010). Bitner (1992), who prefers to use the term service-scapes than physical environment, describes three dimensions, which represent service-scapes: ambient conditions; spatial layout and functionality; and signs, symbols, and artifacts. Ryu and Jang (2008) later on, adopted Bitner's (1992) SERVICE-SCAPES model, develop their own DINESCAPE model. This incorporates six dimensions of the physical dining environment: aesthetics; lighting; ambiance; layout; dining equipment; and service employees. Physical dining environment focuses on the important role of tangible quality on overall perceptions of restaurant quality and behavioural intentions (Raaioot, 2002). The foregoing discussion supports the important role of physical environment in providing comfort and satisfaction to diners, and the consequent effect on behavioural intentions (Ryu and Han, 2010; Ryu and Jang, 2008). Based on the preceding review, the following hypothesis was deducted:

Hypothesis 3: Physical dining environment has a positive significant influence on consumer perceived value.

Moreover, review of literature has shown that the analysis of the association between consumer perceived value and intended future behaviors has revealed that perceived value often emerges as a reflection of customer satisfaction as well as an antecedent and a key determinant of future behavioral intentions (Cronin et al., 2000; Bajis, 2015). However, in foodservice context, not too many studies have been devoted to meticulously examining the relationships amongst consumers perceived value and food quality, service quality, and physical dining environment. Likewise, few research has been conducted to examine the effect of perceived
value on consumers' behavioural intentions (Ryu and Han, 2010). Positive perceived value is an indication of satisfaction, which in turn, lead to positive behavioural intentions such as brand attitude, WOM, and repeat purchases (Cronin et al., 2000). Having said this, the following hypothesis is formulated:

**Hypothesis 4:** Consumer perceived value has a positive significant influence on behavioural intentions.

The aforementioned review on literature has directed to the development of the proposed conceptual model as shown in Figure 1 that portrays the relationships amongst the examined concepts.

### 3 METHOD

#### 3.1 Survey instrument and sample

During a four-month period between June and October 2015, the data were collected through self-administered questionnaire-based survey to restaurant and café patrons in Surabaya. The sampling process was one of convenience.

A review of relevant literature was contributed to the development of the items of the instruments. The questionnaire was divided into four parts. Part 1 sought information about participant demographics such as gender, age, and average monthly income. Part 2 contained questions related to basic eating-out behaviour namely: frequency of dine-out in a month, dining companion, and average money spent. In Part 3, the participants were requested to weigh dining attributes related to quality of food, quality of service, physical dining environment and perceived value on a five-point Likert scale ranged from 'strongly disagree' (1) to 'strongly agree' (5). The last part of the questionnaire elicited participants' behavioural intentions.

#### 3.2 Preliminary data analysis

A total of 5000 questionnaires distributed in 25 restaurants and cafes in Surabaya, providing an equal number of participants approached by the surveyors in every selected restaurant and cafe. There were 3106 questionnaires returned generating a response rate of 62.12%. Prior to data analysis employing the above-mentioned statistical techniques, data-cleaning process was accomplished to test the normality and possible outliers. Ten questionnaires were dropped, leaving a total of 3096 usable questionnaires ready for further data analysis.

The study employed descriptive statistics to describe the participants' profiles meanwhile Partial Least Square (PLS) path modeling was applied to test the proposed research hypotheses.

### 4 RESULTS AND DISCUSSION

#### 4.1 Profile of participants

Among the 3096 participants, 51% were women and 49% were men. The majority of the participants were between 20 and 40 years old (72.2%). Two major groups of university students and employees were dominating at about 70% of total participants. More than 40% of total participants had monthly income of between IDR 2–10 million.

In terms of the participants' dine-out patronage characteristics, the majority of participants went out for dining 3–4 times per week (42.6%), together with friends and family (77.3%), and spent between IDR 100,000 to 299,999 per visit (36.9%).

#### 4.2 Measurement model

In order to assess the research model and test the proposed hypotheses, PLS path analysis was employed. The result of the construct validity testing, as seen from the values of convergent validity and discriminant validity in Figure 2, showed that the validity and reliability levels of all the examined latent variables were good, that is had loading values above the cut-off value of 0.50. This means all the empirical indicators were a valid reflector of the examined latent variables, respectively.

![Figure 1. Conceptual model.](image)

![Figure 2. Path diagram of the research model.](image)
Table 1 exhibits the composite reliability of five latent variables. It shows that all had the score above the cut-off value of 0.70 (reliable).

The result of R-square Model is presented in Table 2. Goodness of fit in PLS can be seen from the Q² value. The value of Q² has the same meaning with the determination coefficient (R-square / R²) in regression analysis. The higher the R², the more fit the model with the data. From the R² values, the Q² value can be calculated as follow: $Q^2 = 1 - [(1 - 0.537)^2 \times (1 - 0.279^2)] = 0.842 = 84.2\%$.

Moreover, the subsequent path analysis revealed the result of the inner weights. Table 3 shows that the relationship among the variables was positive (original sample estimate). From the result of the t-statistics, it appeared that there were two kinds of relationships which were not significant, meaning that the values were less than the cut-off value of 1.96. These were: 1) the relationship between Quality of Physical dining Environment (QPE) and Perceived Value (PV) which obtained a value of 0.547596; and 2) the association between quality of service (SQ) and Perceived Value (PV) which gained a value of 1.458612.

### 4.3 Discussions

The findings of this study have offered useful information for food service business operators in Surabaya that food quality, service quality, and physical dining environment appeared to be positively influence consumer perception towards the value of dining at restaurants and cafes. That is, the better the quality of the food, the service delivered, and the dining environment, the higher the value of dining being perceived by the participants. However, amongst those three factors, food quality was found to be the only antecedent significantly affecting consumer perceived value. On this basis, $H_1$ was accepted while $H_2$ and $H_3$ were then rejected.

Theoretically, the association between service quality and consumer perceived value, as well as quality of physical environment and consumer perceived value should be positive and significant. However, with respect to this study context, it is important to note that the results could be implicated in such a way that, when Surabaya’s consumers dine-out, they tend to be emphasizing more on the quality of food above the quality of service and physical environment. This means that, no matter how the foodservice providers try to offer the best service and attractive physical dining environment to persuade the consumers, they will fail anyway if they do not provide the best quality of food.

The consumers in general will evaluate the quality of food as the first priority besides the quality of service and the physical environment. This is very much relevant in that the primary product of foodservice business is the food itself. For instance, the findings showed that three items of food quality factors namely: taste of the food (FQ1), freshness of the ingredients including the meat, fish, vegetables, fruit, and garnish (FQ3); and the food presentation (FQ5), were the most dominant items reflecting how the participants valued the quality of the food. Therefore, these three items should become the main concern for the business providers in presenting the food since they will determine the quality of the food perceived by the consumers. This fact is supported by Sulek and Hensley (2004) who also found that compared to physical environment and service quality aspects, the quality of food is the most important element in shaping consumer perception towards a restaurant. Further, perceived value was proven to have a positive significant effect on consumer behavioral intentions. As such, $H_4$ was also accepted. This means, the more

### Table 1. Composite reliability of latent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI (Behavioural Intentions)</td>
<td>0.938910</td>
</tr>
<tr>
<td>FQ (Food Quality)</td>
<td>0.804146</td>
</tr>
<tr>
<td>PV (Perceived Values)</td>
<td>0.912340</td>
</tr>
<tr>
<td>QPE (Physical Environment)</td>
<td>0.852248</td>
</tr>
<tr>
<td>SQ (Service Quality)</td>
<td>0.866002</td>
</tr>
</tbody>
</table>

### Table 2. The R Square result.

<table>
<thead>
<tr>
<th>Variable</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI (Behavioural Intentions)</td>
<td>0.537</td>
</tr>
<tr>
<td>FQ (Food Quality)</td>
<td>-</td>
</tr>
<tr>
<td>PV (Perceived Values)</td>
<td>0.279</td>
</tr>
<tr>
<td>QPE (Physical Environment)</td>
<td>-</td>
</tr>
<tr>
<td>SQ (Service Quality)</td>
<td>-</td>
</tr>
</tbody>
</table>

### Table 3. Inner weight result.

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>Standard Error (STERR)</th>
<th>T Statistics (O/STERR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQ → PV</td>
<td>0.364762</td>
<td>0.366028</td>
<td>0.130805</td>
<td>0.048989</td>
<td>2.788600</td>
</tr>
<tr>
<td>PV → BI</td>
<td>0.733357</td>
<td>0.735923</td>
<td>0.04989</td>
<td>0.04989</td>
<td>14.969729</td>
</tr>
<tr>
<td>QPE → PV</td>
<td>0.062896</td>
<td>0.075315</td>
<td>0.114858</td>
<td>0.04989</td>
<td>0.114858</td>
</tr>
<tr>
<td>SQ → PV</td>
<td>0.168155</td>
<td>0.176634</td>
<td>0.115284</td>
<td>0.04989</td>
<td>1.48612</td>
</tr>
</tbody>
</table>

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positive the participants perceived the values of their dining, the participants would more incline to revisit and to give referral about the restaurants or cafes to the others.

5 CONCLUSION

This study has assessed the role of each dining experience aspects and its effect on consumer perceived value and behavioural intentions. Consistent with previous studies, compared to quality of service and physical dining environment aspects, food quality appeared to significantly contribute to how the participants perceived the value of their dining. Further, consumer perceived value itself was found to have a positive and significant influence on behavioural intentions.

Understanding dining-related behaviour is key success for foodservice business operators to win their customers. This study has contributed to provide insights for the foodservice business players in offering the right product mix for the consumers. The findings revealed have also shed light on how the business players should focus on delivering the best value for consumers. That is, emphasizing only on the physical aspects of the restaurants and cafes can be misleading. It is un doubtly that some foodservice business players assume that in order to attract more consumers, they focus on designing attractive physical dining environment. In fact, this is not always true as emerged from this study, the quality of food was a key determinant in affecting consumer perception towards the best value of dining, far more significant than the role of physical dining environment and even the quality of the service personnel.

REFERENCES