
THE EFFECT OF FOOD QUALITY, SERVICE QUALITY, AND TANGIBLES ON HOTEL RESTAURANTS CUSTOMER BEHAVIOURAL INTENTIONS: THE MEDIATING ROLE OF CUSTOMER SATISFACTION

AHMED G. TAGER & MICHAEL M. ZAKI

FACULTY OF TOURISM AND HOTELS, LUXOR UNIVERSITY, EGYPT

FARIDA MOHAMED MEGAHEH

FACULTY OF TOURISM AND HOTELS, UNIVERSITY OF SADAT CITY, EGYPT

TAMER MOHAMED ABBAS

KING SALMAN INTERNATIONAL UNIVERSITY, EGYPT

ABSTRACT

This study empirically examined the relationships between food quality, service quality, tangibles, customer satisfaction and behavioral intentions in hotel restaurants. Specifically, this study, using Linear regression coefficients analyses, a total of 360 questionnaire forms were distributed to customers, only 352 customers positively shared the questionnaire, only 345 questionnaires were valid and complete. As expected, this study showed that food and service quality have positive and significant effects on customer satisfaction and behavioral intentions. Further, providing the tangibles is particularly critical for creating customer satisfaction in hotel restaurants. finally, the findings indicated that customer satisfaction is indeed a significant mediating predictor of behavioral intention.

KEYWORDS: Food Quality, Service Quality, Tangibles, Behavioral Intentions, and Customer Satisfaction.

INTRODUCTION

Hyun and Kang (2014) pointed that the restaurant industry has been rapidly grown over the past two decades. Consistent with this phenomenon, in many hotels, restaurants within the property are also becoming an important source of the hotels' revenues, particularly in the cities/destinations where hotels are abundant (Kang *et al.*, 2015). Despite its popularity, the competition in the hotel restaurant segment is getting fiercer than ever due to the enormous increase of new restaurant openings within hotels (Kwon *et al.*, 2014) and the fast growth of the general restaurant market (Hwang & Hyun, 2013). This hotel restaurant sector is now gradually reaching the maturity phase of its life cycle. Moreover, the

re-visitation rate of the restaurant sector is generally lower than other segments of the restaurant industry because of the high price involved in dining.

Certainly, many researchers have utilized a variety of perspectives to understand variables that enhance repeat customer patronage by minimizing the probability of switching incidents (Hwang & Hyun, 2014; Han *et al.*, 2016). The general agreement made by these scholars is that quality, and satisfaction among diverse variables are the major concepts in explicating customer post-purchase decision formation. In other words, in their studies in various sectors, such constructs as quality and satisfaction are cited as key variables affirming patrons' intentions to continue/terminate the existing relation with a provider. Moreover, previous studies in the extant consumer behavior and hospitality literature have indicated that conspicuousness of product/service consumption plays an essential role in customers' post-purchase decision formation, particularly for products/services (Han and Hyun, 2017).

Specifically, the objectives of this study were: (1) the impact of restaurant quality attributes (food quality, service quality and tangibles) and behavioral intentions (revisit and recommendation intentions and (2) the moderating role of customer satisfaction on the relationships between restaurant quality attributes and behavioral intentions.

FOOD QUALITY

MacLaurin & MacLaurin, (2000) indicated that food quality is considered one of the most crucial factors affecting customers' dining experience. Commonly used construct items include food taste, meal presentation, dish diversity, material freshness, adequate temperature (appropriately heated or cooled), sufficient serving portion, and healthy design. Additional items were included in studies targeting various themes. For example, food quality consistency was added in a study of theme restaurants in Singapore (Soriano, 2002). Others items included: innovative food, for upscale restaurants in Spain (Namkung and Jang, 2007); accurate order, for chain restaurants (Gupta *et al.*, 2007); correct menu and available utensils, for corporate internal training program meetings (Kim *et al.*, 2009); and food security, for Chinese restaurants (Liu & Jang, 2009).

Kim *et al.* (2009) explained that food quality is one of the most critical components of a dining experience. Previous studies have empirically investigated the importance of food quality in restaurant settings; for example, Ha and Jang, (2010) confirmed that food quality is a primary factor influencing customer loyalty in restaurant choice; Ha and Jang (2010) insisted that from the customer's perspective, food quality is a key

determinant for visiting a restaurant; Wei and Huang (2013) found that when compared with other aspects of the restaurant, such as environmental components and service quality, food quality is the most important element of customer satisfaction. Recently, Joung et al. (2015) tested the impact of food quality on customer satisfaction and behavioral intentions and found a positive linkage between food quality and satisfaction/behavioral intentions.

SERVICE QUALITY

Parasuraman et al. (1988) proposed the following 10 determinate attributes to evaluate service quality: access, communication, competence, courtesy, credibility, reliability, responsiveness, security, tangibles, and customer understanding. Later, Parasuraman et al. (2001) simplified their 10 attributes into the following five attributes which were used to evaluate the customer's perception of service quality: reliability, responsiveness, assurance, empathy, and tangibility.

Hong (2001) explained that service quality is a multidimensional construct that has vaguely been defined and redefined as a consumer's global evaluations and perceptions concerning the quality or excellence of delivery. Akbaba (2006) contend that consumption decisions are highly impacted by service quality. More specifically, the quality of service or products rendered will determine if consumers will switch to competing restaurants or engage in repeat patronage (Ryu & Han, 2010). Along with increases in financial performance, consumer loyalty, retention of new consumers, and positive word of mouth, future behavioral intentions have been highlighted as providing some positive outcomes for service firms in the hospitality segment (Chen & Hu, 2010). Equally, in the restaurant sector, service quality has been found to translate into increased positive tangible and intangible profits (Barber *et al.*, 2011).

Ma *et al.* (2014) showed that service quality has become the most powerful factor which affects the competitive advantage of service suppliers to survive in the fast-food industry; moreover, it is the customer's assessment for the service provided by the supplier. Service quality refers to customer's consistent assessment for the service they received (Jin *et al.*, 2013). Lee and McCleary (2013) indicated that service quality as the measurement of the difference between customer service expectation and the customer's perception of actual delivered service.

TANGIBLES

Zeithaml and Bitner (2003) expressed that tangible element of service there is general agreement in the literature that tangible elements of service (e.g., ambience, layout) affect the experience quality of the customer and influence purchase behavior, Wall and Berry, (2007) coined the term services cape to denote the physical elements of the service environment. According to Zeithaml and Bitner (2003) the services cape consists of three tangible factors that influence customer perceptions of quality resulting in their level of satisfaction and behavioral intentions. The services cape factors include ambient conditions (e.g., temperature, noise, odors), spatial layout and functionality (e.g., arrangement of furnishings and their relationship to customer and employee needs), and signs, symbols and artifacts (e.g., signage and decor which facilitates a desired image or mood), The services cape takes on greater importance for patrons who spend extended time in the facility (e.g., restaurants, theaters, sporting events) as opposed to services that have a quick transaction (e.g., bank, dry cleaners).

Tangibles pertain to the appearance of the establishment's physical facilities, equipment, and personnel. Thus, tangibles are used by restaurants to communicate their image and signal quality to customers (Moon, 2013). The aforesaid authors concur that services are intangible not only because customers cannot see, feel, smell, hear or taste, but it is also because they are difficult to conceptualize. The intangibility aspect makes services difficult to illustrate, describe and communicate (Kasapila, 2006). As a result, what a restaurant intends to deliver might be quite different from what the patrons (Ryu & Han, 2010).

CUSTOMER SATISFACTION

Cronin *et al.* (2000) argued that customer satisfaction in services has been defined as the degree to which service performance meets or exceeds the customer's expectations. Yuksel and Yuksel (2003) defined satisfaction as an evaluative judgment of a specific transaction resulting from perceived quality. On the other hand, Trail *et al.* (2005) defined customer retention as "the future propensity of a customer to stay with the service provider". According to them, customer satisfaction is not the only variable that influences the retention of customers. Wu & Liang, (2009) referred that customer retention as the marketing goal of preventing a customer from switching to another competitor. Hui and Zheng (2010) stated that "customer retention indicates customer's intention to repurchase a service from the service provider". They used customer retention as a measure of the customer's intention to stay loyal to the service provider. For them,

service quality and customer satisfaction are important antecedents of customer retention.

Service fulfillment, or satisfaction, is achieved when service encounters meet or exceed the anticipated need of the consumer (Molapo and Mukwada, 2011). Moreover, Edward and Sahadev (2011) maintained that firm profitability and long-term retention have been attributed to consumer satisfaction. Conversely, negative disconfirmation occurs when there are inconsistencies (Danesh *et al.*, 2012). Yoshida and James (2010) explained that consumer loyalty, positive behavioral intentions, such as repeat purchases, minimized perceived risk, and positive word of mouth, have been established as key benefits reaped from consumer satisfaction. Particularly, in the restaurant segment, consumer satisfaction has been delineated as a competitive advantage leading to favorable outcomes, such as repeat patronage, and establishing long-term commitments and consumer loyalty (Ryu *et al.*, 2012). Su and Hsu, (2013) agreed with Kumar, (2012) that in the hospitality industry, satisfaction research is predicated on how well a firm's performance compares to consumers' expectations. The model of consumer satisfaction is determined by service delivery that matches or fails to match consumer perceptions and evaluations (Hanaysha and Hilman, 2015).

BEHAVIORAL INTENTIONS

Zeithaml, (1988) argued that behavioral intention is specifically expressed as revisit intention, positive word-of-mouth, and willingness to recommend to others. Consequently, customers' behavioral intention should be considered as one of the most important constructs in the service market field (Caruana, 2002). Because loyal customers—or customers having positive behavioral intention—will revisit, repurchase, and recommend to others, increasing positive behavioral intention may be considered the primary goal of a company in order to improve their profits (Kim and Han, 2008). In addition, Yi and Gong (2008) explained that word-of-mouth intentions are defined as “informal, person to person communication between a perceived noncommercial communicator and a receiver regarding a brand, a product, an organization or a service”.

In this particular restaurant setting, the current study focused on revisit intention and positive recommendation as signals of behavioural intentions. Revisit intention is considered to be one of the most common cues for positive behavioral intention, and in the service market field, recommendation is one of the most useful and reliable communication tools (Ha & Jang, 2010). Thus, Oliver (2010) suggested that recommendation is considered to be an aspect of behavioral intention and a

consequence of customer's response after the consumption experience. According to the theory of reasoned action, behavioral intention is a very accurate predictor of most social behavior (Fan & Miao, 2012).

According to Lee *et al.* (2010) behavioural intentions can be defined as "a stated likelihood to engage in a behavior. It is widely accepted that behavioural intentions include the following three concepts (Han and Hyun, 2017): intentions to use and word-of-mouth intentions. First, the concept of intentions to use refers to "the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior (Jeon *et al.*, 2018). Byun and Jang (2018) agreed with Han *et al.* (2017) that intentions to use are formed after a customer's favorable evaluation of the product/service. More importantly, since intentions to use directly affects actual consumption, several previous studies have sought to find the predictors of intentions to use (Jeon *et al.*, 2018).

QUALITY, CUSTOMER SATISFACTION AND BEHAVIORAL INTENTIONS

Hume and Mort (2010) agreed with Cronin *et al.* (2000) that the conceptual relationships among service encounter constructs, such as perceived quality, satisfaction, and behavioral intentions, have been well documented. Past empirical studies have evidenced a direct link between perceived quality and satisfaction (Ueltschy *et al.*, 2009) and between perceived quality and behavioral intentions (Fullerton, 2005). Based on these theoretical foundations and empirical evidences, a limited number of studies have also examined the effects of service quality in hotel restaurants (i.e., technical and functional factors) on satisfaction and behavioral intentions. These studies concluded that various components of restaurant service quality function differently in terms of improving satisfaction and behavioral intentions (Liu & Jang, 2009). Along similar lines, this study attempted to identify which components of quality significantly influence satisfaction and behavioral intentions.

Kim *et al.* (2013) showed that it is generally agreed that higher levels of customer satisfaction led to higher levels of behavioral intention, which is represented by revisit intention and recommend. Previous studies have shown a positive relationship between quality, customer satisfaction and behavioral intentions (Baker & Crompton, 2000). However, there has been no consistency in terms of the direction and strength of these relationships (Walter *et al.*, 2010). Prebensen *et al.* (2014) postulated that in the context of hotel restaurants, food, service and ambience quality have been reported to have a positive impact on customer behavioral intention. Namkung and Jang (2007) showed that food quality positively influences a customer's dining experience. Mattila (2001) suggested that food quality was the most

important dimension of restaurant quality and a key predictor of customer loyalty in hotel dining restaurants.

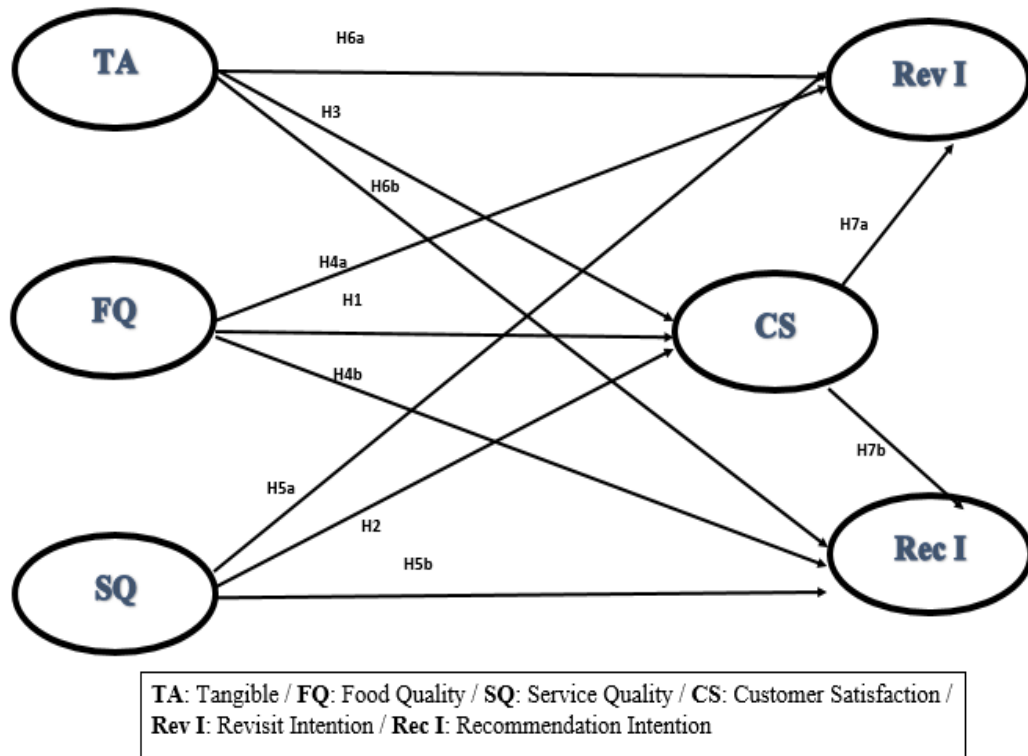


Figure 1: The proposed research model

METHODOLOGY

SAMPLE

The target population for this study was all hotel restaurants' customer in four-star and five-star hotels. This study used Aswan and Luxor four and five-star hotels as the population. Three hundred and sixty questionnaire forms were distributed to a random sample of hotel restaurant customers in the participated hotels, out of them 345 forms were completed and valid for analysis with a response rate of 95.8%. Cronbach's α values of all variables of the study exceeds 0.70, supporting sufficient measurement reliability suggested, so that the study measurements were acceptable and reliable.

SURVEY INSTRUMENT

The final version of the questionnaire was divided into two sections. In the first section, customers were asked to rate 32 items on a five-point Likert type scale: ‘strongly disagree’; ‘disagree’; ‘neither agree nor disagree’; ‘agree’; and ‘strongly agree’. The 32 items are divided into six variables: tangibles (9 items), service quality (6 items), food quality (7 items), customer satisfaction (4 items), revisit intention (3 items), and recommendation intention (3 items). The second section asked customers for profiling information (e.g., gender, age, educational, family status, occupation, and nationality).

FINDING

SAMPLE CHARACTERISTIC

Table 1: Sample characteristic

Variable		No.	Percentage %
Gender	Male	160	46.3
	Female	185	53.7
Hotel degree	4 Star	115	33.33
	5 Star	230	66.67
Age	Less than 20 years	67	19.42
	From 20 to 30 years	84	24.35
	From 31 to 40 years	60	17.39
	From 41 to 50 years	104	30.14
	More than 50	30	8.70
Educational background	University	211	61.07
	High school	79	22.82
	Postgraduate	56	16.11
Family Status	Married	178	51.7
	Single	114	32.9
	Children	16	4.7
	Others	37	10.7
Occupation position	Civil servant	65	18.8
	Self-employed	90	26.2
	Retired	97	28.2
	Student	21	6

	Housewife	28	8
	Others	44	12.8
Nationality	Egyptian	111	32.2
	Chinese	83	24.2
	American	44	12.8
	French	26	7.3
	English	23	6.7
	Others	58	16.8

Table 2: Descriptive statistics for main variables of the study

The Axis	Mean	95% Confidence Interval for Mean*	Sig.
Tangibles	3.67	3.5 - 3.7	0.000
Service Quality	3.91	3.8- 4.01	0.077
Food Quality	3.79	3.69- 3.88	0.000
Customer Satisfaction	4.17	4.07- 4.26	0.001
Revisit Intention	4.36	4.28- 4.44	0.000
Recommendation Intention	4.41	4.33- 4.48	0.000

95% Confidence Interval for Mean of the study population $\bar{X} \pm t_{0.025,55} * Std.Error$

TEST OF HYPOTHESES

To test H₁ that food quality has a significant positive influence on customer satisfaction, linear regression coefficient was used as follows:

Table 3: Linear regression coefficients for the influence of food quality on customer satisfaction

Model	ANOVA	Beta	T	Sig.
(constant)		2.015	7.111	.000
Food quality	0.000	0.568	7.680	.000

a. Dependent variable: customer satisfaction

From the table (3), it showed that there is a significant positive influence of food quality on customer satisfaction (ANOVA Sig. = 0.000), this result suggests that the first hypothesis of the study is valid. The following equation for predicting the level of customer satisfaction

with the information about the level of food quality can be suggested as follow:

$$\text{Customer satisfaction} = 2.015 + (0.568 * \text{food quality})$$

To test H_2 that service quality has a significant positive influence on customer satisfaction, linear regression coefficient was used as follows:

Table 4: Linear regression coefficients for the influence of service quality on customer satisfaction

Model	ANOVA	Beta	T	Sig.
(constant)		1.803	7.667	.000
Service quality	0.000	0.605	10.189	.000

a. Dependent variable: customer satisfaction

Table (4) shows that there is a significant positive influence of service quality on customer satisfaction (ANOVA Sig. = 0.000), this result suggests that the second hypothesis of the study is valid. The following equation for predicting the level of customer satisfaction with the information about the level of service quality can be suggested as follow:

$$\text{Customer satisfaction} = 1.803 + (0.605 * \text{service quality})$$

The researcher adopts linear regression coefficient to test H_3 that tangibles have a significant positive influence on customer satisfaction as follows:

Table 5: Linear regression coefficients for the influence of tangibles on customer satisfaction

Model	ANOVA	Beta	T	Sig.
(constant)		2.873	8.5	.000
Tangibles	0.000	0.353	3.8	.000

a. Dependent variable: customer satisfaction

From the table (5), it showed that there is a significant positive influence of tangibles on customer satisfaction (ANOVA Sig. = 0.000), this result suggests that the third hypothesis of the study is valid. The following equation for predicting the level of customer satisfaction with the information about the level of tangibles can be suggested as follow:

$$\text{Customer satisfaction} = 2.873 + (0.353 * \text{level of tangibles})$$

To test H4a that food quality has a significant positive influence on revisit intentions, linear regression coefficient was used as follows:

Table 6: Linear regression coefficients for the influence of food quality on revisit intentions

Model	ANOVA	Beta	T	Sig.
(constant)		3.307	11.921	.000
Food quality	0.000	0.279	3.856	.000

a. Dependent variable: revisit intentions

From the table (6), it showed that there is a significant positive influence of food quality on revisit intentions (ANOVA Sig. = 0.000), this result suggests H4a of the study is valid. The following equation for predicting the level of revisit intention with the information about the level of food quality can be suggested as follow:

$$\text{Revisit intentions} = 3.307 + (0.279 * \text{food quality})$$

To test H4b that food quality has a significant positive influence on recommendation intentions, linear regression coefficient was used as follows:

Table 7: Linear regression coefficients for the influence of food quality on revisit recommendation

Model	ANOVA	Beta	T	Sig.
(constant)		3.684	15.450	.000
Food quality	0.003	0.191	3.073	.003

a. Dependent variable: recommendation intentions

From the previous table, it showed that there is a significant positive influence of food quality on recommendation intentions (ANOVA Sig. = 0.003), this result suggests H4b of the study is valid. The following equation for predicting the level of recommendation intention with the information about the level of food quality can be suggested as follow:

$$\text{Recommendation intention} = 3.684 + (0.191 * \text{food quality})$$

To test H5a that service quality has a significant positive influence on revisit intentions, linear regression coefficient was used as follows:

Table 8: Linear regression coefficients for the influence of service quality on revisit intentions

Model	ANOVA	Beta	t	Sig.
(constant)	0.000	3.059	12.579	.000
Service quality		0.334	5.441	.000

a. Dependent variable: revisit intentions

From the previous table, it showed that there is a significant positive influence of service quality on revisit intentions (ANOVA Sig. = 0.000), this result suggests H5a of the study is valid. The following equation for predicting the level of revisit intentions with the information about the level of service quality can be suggested as follow:

$$\text{Revisit intentions} = 3.059 + (0.334 * \text{service quality})$$

To test H5b that service quality has a significant positive influence on recommendation intentions, linear regression coefficient was used as follows:

Table 9: Linear regression coefficients for the influence of service quality on recommendation intentions

Model	ANOVA	Beta	T	Sig.
(constant)	0.000	3.459	16.408	.000
Service quality		0.243	4.570	.000

a. Dependent variable: recommendation intentions

From the previous table, it showed that there is a significant positive influence of service quality on recommendation intentions (ANOVA Sig. = 0.000), this result suggests H5b of the study is valid. The following equation for predicting the level of recommendation intentions with the information about the level of service quality can be suggested as follow:

$$\text{Recommendation intentions} = 3.459 + (0.243 * \text{service quality})$$

To test H6a that tangibles have a significant positive influence on revisit intentions, linear regression coefficient was used as follows:

Table 10: Linear regression coefficients for the influence of tangibles on revisit intentions

Model	ANOVA	Beta	t	Sig.
(constant)		3.561	11.849	.000
Tangibles	0.008	0.219	2.702	.008

a. Dependent variable: revisit intentions

Table (10) revealed that there is a significant positive influence of tangibles on revisit intentions (ANOVA Sig. = 0.008), this result suggests H6a of the study is valid. The following equation for predicting the level of revisit intention with the information about the level of tangibles can be suggested as follow:

$$\text{Revisit intentions} = 3.561 + (0.219 * \text{level of tangibles})$$

To test H6b that tangibles have a significant positive influence on recommendation intentions, linear regression coefficient was used as follows:

Table 11: Linear regression coefficients for the influence of tangibles on recommendation intentions

Model	ANOVA	Beta	T	Sig.
(constant)		3.892	15.166	.000
Tangibles	0.043	0.141	2.037	.043

a. Dependent variable: recommendation intentions

From the previous table, it showed that there is a significant positive influence of tangibles on recommendation intentions (ANOVA Sig. = 0.043), this result suggests H6b of the study is valid. The following equation for predicting the level of recommendation intentions with the information about the level of tangibles can be suggested as follow:

$$\text{Recommendation intentions} = 3.892 + (0.141 * \text{level of tangibles})$$

To test H7a that customer satisfaction has a significant positive influence on revisit intentions, linear regression coefficient was used as follows:

Table 12: Linear regression coefficients for the influence of customer satisfaction on revisit intentions

Model	ANOVA	Beta	T	Sig.
(constant)		1.723	8.372	.000
Customer satisfaction	0.000	0.634	12.969	.000

a. Dependent variable: revisit intentions

From the previous table, it showed that there is a significant positive influence of customer satisfaction on revisit intentions (ANOVA Sig. = 0.000), this result suggests H7a of the study is valid. The following equation for predicting the level of revisit intention with the information about the level of customer satisfaction can be suggested as follow:

$$\text{Revisit intentions} = 3.561 + (0.219 * \text{customer satisfaction})$$

To test H7b that customer satisfaction has a significant positive influence on recommendation intentions, linear regression coefficient was used as follows:

Table 13: Linear regression coefficients for the influence of customer satisfaction on recommendation intentions

Model	ANOVA	Beta	T	Sig.
(constant)		2.387	12.500	.000
Customer satisfaction	0.000	0.485	10.696	.000

a. Dependent variable: recommendation intentions

From the previous table, it showed that there is a significant positive influence of customer satisfaction on recommendation intentions (ANOVA Sig. = 0.000), this result suggests H7b of the study is valid. The following equation for predicting the level of recommendation intention with the information about the level of customer satisfaction can be suggested as follow:

$$\text{Recommendation intentions} = 2.387 + (0.485 * \text{customer satisfaction})$$

Path analysis statistical approach used to test H8 the mediating role of customer satisfaction on the relationships between restaurant quality attributes and customer revisit.

First, regression coefficient is applied to test whether the independent variable "Restaurant attributes" is related to the dependent variable,

customer revisit. As shown in table (14) "Restaurant attributes" is positively and significantly related to customer revisit ($R = 0.61$, $P < 0.000$), suggesting that "Restaurant attributes" increases customer revisit. Then, the researcher tested whether the independent variable "Restaurant attributes" is related to the mediator, customer satisfaction. As shown in table (15), "Restaurant attributes" is positively and significantly related to the customer satisfaction ($R = 0.77$, $P < 0.000$). Finally, as shown in table (16), "Restaurant attributes" has no significant effect on customer revisit ($P = 0.177 > 0.05$), the previous results support H8 where customer satisfaction mediates the effect of restaurant attributes on customer revisit.

Table 14: Correlations between restaurant attributes and customer revisit

		Customer revisit	Restaurant attributes
Restaurant attributes	Pearson Correlation	1	.61**
	Sig. (2-tailed)		.000
	N	149	149
Customer revisit	Pearson Correlation	.61**	1
	Sig. (2-tailed)	.000	
	N	149	149
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 15: Correlations between restaurant attributes and customer satisfaction

		Customer Revisit	Restaurant Attributes
Restaurant Attributes	Pearson Correlation	1	.77**
	Sig. (2-tailed)		.000
	N	149	149
Customer Satisfaction	Pearson Correlation	.77**	1
	Sig. (2-tailed)	.000	
	N	149	149
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 16: Multiple regression coefficients for the influence of restaurant attributes and customer satisfaction on customer revisit

Model	R	R2	Beta	T	Sig.
(Constant)			1.9	7.806	.000
Restaurant attributes	0.734	0.539	0.682	11.294	.000
Customer satisfaction			0.1	1.357	.177

Path analysis statistical approach used to test H9 that customer satisfaction mediates the effect of restaurant attributes on customer recommendation

First, regression coefficient is applied to test whether the independent variable "Restaurant attributes" is related to the dependent variable, customer recommendation. As shown in table (17) "Restaurant attributes" is positively and significantly related to customer recommendation ($R=0.72$, $P<0.000$), suggesting that "Restaurant attributes" increases customer recommendation. Then, researcher tested whether the independent variable "Restaurant attributes" is related to the mediator, customer satisfaction. As shown in table (16), "Restaurant attributes" is positively and significantly related to the customer satisfaction ($R=0.77$, $P<0.000$). Finally, as shown in table (15), "Restaurant attributes" has no significant effect on customer recommendation ($P=0.098 > 0.05$), the previous results support H9 where customer satisfaction mediates the effect of restaurant attributes on customer recommendation.

Table 17: Correlations between restaurant attributes and customer recommendation

		Customer Recommendation	Restaurant Attributes
Restaurant attributes	Pearson Correlation	1	.72**
	Sig. (2-tailed)		.000
	N	149	149
Customer recommendation	Pearson Correlation	.72**	1
	Sig. (2-tailed)	.000	
	N	149	149
**. Correlation is significant at the 0.01 level (2-tailed).			

Table18: Multiple regression coefficients for the influence of restaurant attributes and customer satisfaction on customer recommendation

Model	R	R ²	Beta	T	Sig.
(Constant)			2.5	11.53	.000
Restaurant attributes	0.67	0.449	0.118	1.7	.000
Customer satisfaction			0.542	9.75	.098

Using AMOS program version 23, the study model's goodness of fit was tested (AGFI=0.91>0.80, GFI=0.9>0.80). Rick (2014) showed that AGFI and GFI values more than 0.8 represent good model fit.

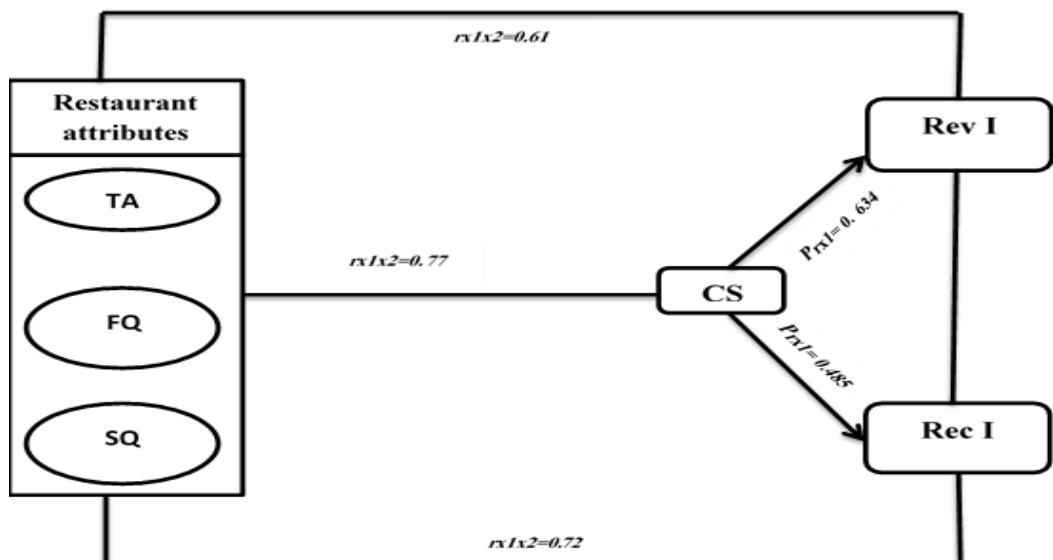


Figure 2: Final structure equation model

RESULTS AND DISCUSSION

This research empirically examined the effect of restaurant attributes (food, service, and tangibles) on customer satisfaction and behavioral intentions in the restaurant consumption context. The findings support the hypothesized positive linkages among restaurant attributes, satisfaction, and behavioral intentions, similar to the results of a tourism study by Han and Hyunb, (2017); that is, restaurant quality and satisfaction play an important role in determining customer behavioral intentions toward restaurants.

This research makes important contributions toward understanding the formation of customer satisfaction and behavioral intention in the quick-casual restaurant industry. Findings revealed that customers' perceived quality of food, such as delicious, nutritious, and visually attractive, is a significant predictor of customer satisfaction and behavioral intentions, and perceived customer satisfaction moderates the relationship between quality of food and customer intentions. This result supporting hypotheses 1 and 4. In addition, quality of service increases customers' satisfaction and behavioral intentions level, and customers' satisfaction enhances the effect of quality of service on customer behavioral intentions. This result supporting hypotheses 2 and 5. Further, when customers feel that the tangibles reflect quality, such as attractive interior design/décor and pleasant music/color/lighting, their customer satisfaction and behavioral intentions level increases. Customers' satisfaction also increases the effect of quality of tangibles on their intentions in hotel restaurants. This result supporting hypotheses 3 and 6. Knowledge of the impact of perceived quality experienced by customers during their service encounter on retrospective satisfaction can help restaurateurs maximize satisfaction with the foodservice delivery process. Our results also provide strong support for the causal relationship from customer satisfaction to behavioral intention.

Patrons' satisfaction with their overall experiences in a hotel restaurant was identified to have a greater total influence on intentions than that of other research variables within our proposed theoretical framework. This research confirmed the salient role of customer satisfaction in determining behavioral intentions. Our result is coherent with a considerable number of studies in a variety of contexts that stressed the prominence of customer satisfaction (e.g., Brunner *et al.*, 2008; Musa *et al.*, 2012). Our finding implies that when patrons are wholly satisfied, they express strong intentions to repeatedly visit the restaurant in a hotel and recommendation these restaurants to others. Accordingly, in order to generate these positive post-purchase intentions, practitioners should seek to improve patrons' overall satisfaction level by boosting diverse hotel restaurant attributes.

The mediation analysis revealed that restaurant attributes played an important mediating role in generating patrons' behavioral intentions. In particular, these variables significantly mediated the impact of restaurant attributes on intentions to revisit it and recommendation of the restaurants' hotel within our proposed theoretical framework. This result is consistent with findings of the previous studies that emphasized the mediating role of these variables (e.g., Namkung and Jang, 2007; Ryu and Han, 2010). As our result indicates, diverse efforts of increasing these mediators would be

effective tools for exploiting the impact of restaurant attributes on its subsequent variables of patrons' positive post-purchase intentions for hotel restaurants.

THEORETICAL AND MANAGERIAL IMPLICATIONS

From a theoretical standpoint, this study makes important contributions toward understanding the formation of customer satisfaction and behavioral intentions in hotel restaurants. Findings revealed that customers' perceived quality of food, such as delicious, nutritious, and visually attractive, is a significant predictor of customer behavioral intentions, and customer satisfaction moderates the relationship between quality of food and behavioral intentions. In addition, quality of service increases customers' satisfaction level. Further, when customers feel that the tangibles reflect quality, such as attractive interior design/décor and pleasant music/color/lighting, it increases their intention to revisit. Customer satisfaction increases the effect of restaurants' attributes quality on the customers' intentions to recommend and revisit the hotel restaurants. Knowledge of the impact of perceived quality experienced by customers during their service encounter on retrospective satisfaction can help restaurateurs maximize satisfaction with the foodservice delivery process. Our results also provide strong support for the causal relationship from customer satisfaction to behavioral intentions.

SUMMARY AND CONCLUSIONS

Increasing customers' repeat patronage in a hotel restaurant and revisit these restaurants again within the same hotel are important challenges for every hotel firm since such an increase is directly associated with the company's profit increase and success. This research successfully examined the formation of patrons' intention to recommend and intention to revisit a hotel restaurant by considering the convoluted associations among food quality, service quality, tangibles, satisfaction, and conspicuousness in the hotel industry. The results from our assessment of the role of these key variables as direct contributors or as a moderator (conspicuousness) in building such intentions within our theoretical framework offers practitioners in hotel restaurants and the hotel management valuable insights when planning, developing, and executing various strategies for higher retention rate, loyalty enhancement, and profit increase.

REFERENCES

- Akbaba, A. (2006). Measuring service quality in the hotel industry: A study in a business hotel in Turkey. *International Journal of Hospitality Management*, 12(2), 170–192.
- Baker, A. & Crompton, L. (2000). Quality, satisfaction, and behavioral intention. *Annals of Tourism Research*, 27(3), 785–804.
- Barber, N., Goodman, J., & Goh, K. (2011). Restaurant consumers repeat patronage: A service quality concern. *International Journal of Hospitality Management*, 30(2), 329–336.
- Brunner, A., Stocklin, M., & Opwis, K. (2008). Satisfaction, image and loyalty: new versus experienced customers. *Eur. J. Mark.*, 42 (9/10), 1095–1105.
- Byun, J. & Jang, S. (2018). To compare or not to compare?": comparative appeals in destination advertising of ski resorts. *J. Destin. Mark. Manag.*, 10, 143–151.
- Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36, 811–828.
- Chen, P. & Hu, H. (2010). How determinant attributes of service quality influence customer-perceived value: an empirical investigation of the Australian coffee outlet industry. *International Journal of Contemporary Hospitality Management*, 22(4), 535–551.
- Cronin, J., Brady, K., & Hult, M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218
- Danesh, S., Nasab, S., & Ling, K. (2012). The Study of Customer Satisfaction, Customer Trust and Switching Barriers on Customer Retention in Malaysia Hypermarkets. *International Journal of Business and Management*, 7(7), 141-150.
- Edward, M. & Sahadev, S. (2011). Role of Switching Costs in the Service Quality, Perceived Value, Customer Satisfaction and Customer Retention Linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327-345.
- EHA, (Egyptian Hotel Association). (2016). *The Egyptian Hotel Guide*, Thirty-four Edition, ETF, Cairo, pp.44-48.

- Fan, W. & Miao, F. (2012). Effect of electronic word-of-mouth on consumer purchase intention: the perspective of gender differences. *Int. J. Electron. Bus. Manage*, 10(3), 175.
- Fullerton, G. (2005). The service quality-loyalty relationship in the retail services: does commitment matter? *Journal of Retailing and Consumer Services*, 12, 99– 111.
- Gupta, S., McLaughlin, E., & Gomez, M. (2007). Guest satisfaction and restaurant performance. *Cornell Hotel and Restaurant Administration Quarterly*, 48(3), 284-298.
- Ha, J. & Jang, S. (2010). Effects of Service Quality and Food Quality: The Moderating Role of Atmospherics in An Ethnic Restaurant Segment. *International Journal of Hospitality Management*, 29, 520–529.
- Han, H. & Hyun, S. (2017). Key factors maximizing art museum visitors' satisfaction, commitment, and post-purchase intentions. *Asia Pacific J, Tour. Res*, 22(8), 834–849.
- Han, H., Hwang, J., & Lee, M. (2016). Antecedents of travelers' repurchase behavior for luxury cruise product. *Curr. Issues Tourism* (in press).
- Han, H., Meng, B., & Kim, W. (2017). Emerging bicycle tourism and the theory of planned behavior. *J. Sustain. Tour*, 25(2), 292–309.
- Hanaysha, J. & Hilman, H. (2015). Examining the role of service quality in relationship quality creation: Empirical insights from Malaysia. *Mediterranean Journal of Social Sciences*, 6(4), 458-465.
- Hong, C. (2001). Managing service quality. *Breakthrough Magazine*, 192, 14–17.
- Hui, C. & Zheng, X. (2010). Measuring customer satisfaction of FM service in housing sector: A structural equation model approach. *Facilities*, 28(5), 306-320.
- Hume, M. & Sullivan Mort, G. (2010). The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the performing arts. *Journal of Services Marketing*, 24(2), 170–182.
- Hwang, J. & Hyun, S. (2013). The impact of nostalgia triggers on emotional responses and revisit intentions in luxury restaurants: the moderating role of hiatus. *Int. J. Hosp. Manage*, 33, 250–262.

- Hwang, J., & Hyun, S. (2014). First-class airline travelers' perception of luxury goods and its effect on loyalty formation. *Current Issues Tourism*, 20(5), 497–520.
- Hyun, S. & Kang, J. (2014). A better investment in luxury restaurants: environmental or non-environmental cues? *Int. J. Hosp. Manage.* 39, 57–70.
- Jeon, M., Ali, F., & Lee, W. (2018). Determinants of consumers' intentions to use smartphones apps for flight ticket bookings. *Serv. Ind J*, 1–18.
- Jin, P., Line, D., & Goh, B. (2013). Experiential value, relationship quality, and customer loyalty in full-service restaurants: the moderating role of gender. *Journal of Hospitality Marketing & Management*, 22, 679-700.
- Joung, H., Choi, E., & Goh, B. (2015). The Impact of Perceived Service and Food Quality on Behavioral Intentions in Continuing Care Retirement Communities: A Mediating Effect of Satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 16(3), 221-234.
- Kang, J., Tang, L., & Lee, J. (2015). Self-congruity and functional congruity in brand loyalty. *J. Hosp. Tourism Res*, 39(1), 105–131.
- Kasapila, W. (2006). Young adults' satisfaction regarding their dining experience in casual dining restaurants in Hatfield. Pretoria.
- Kim, G., Ng, N., & Kim, S. (2009). Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth. *International Journal of Hospitality Management*, 28(1), 10 –17.
- Kim, H. J., Park, J., Kim, M.-J., & Ryu, K. (2013). Does Perceived Restaurant Food Healthiness Matter? Its Influence on value, Satisfaction and Revisit Intentions in Restaurant Operations in South Korea. *International Journal of Hospitality Management*, 33, 397–405.
- Kim, W. & Han, H. (2008). Determinants of restaurant customers' loyalty intentions: A mediating effect of relationship quality. *Journal of Quality Assurance in Hospitality and Tourism*, 9, 219–239.
- Kumar, S. (2012). Expectations and Perceptions of Passengers on Service Quality with Reference to Public Transport Undertakings. *The IUP Journal of Operations Management*, XI(3), 67-81.

- Kwon, H., Kang, M., & Han, H., (2014). Investigating the differences on customers' experiences with luxury-hotel restaurants for physical environment, image, satisfaction, revisit intention, and visit intention to other restaurants. *Int. J. Tourism Hosp. Res*, 28 (12), 45–60.
- Lee, T. & McCleary, K. (2013). The relationship between perceived health, health attitude, and healthy offerings for seniors at family restaurants. *Cornell Hospitality Quarterly*, 54(3), 262–273.
- Lee, S., Hsu, T., Han, H., & Kim, Y. (2010). Understanding how consumers view green hotels: how a hotel's green image can influence behavioural intentions. *J. Sustain, Tour*, 18(7), 901–914.
- Liu, Y. & Jang, S. (2009). Perceptions of Chinese restaurants in the U.S.: What affects customer satisfaction and behavioral intentions? *International Journal of Hospitality Management*, 28, 338–348.
- Ma, E., Qu, H., & Eliwa, A. (2014). Customer loyalty with fine dining: The moderating role of gender. *Journal of Hospitality Marketing & Management*, 23(5), 513–535.
- MacLaurin, J. & MacLaurin, L. (2000). Customer perceptions of Singapore's theme restaurants. *Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 75–85.
- Mattila, S. (2001). Emotional bonding and restaurant loyalty. *Cornell Hotel and Restaurant Administration Quarterly*, 42(6), 73–79.
- Molapo, M. & Mukwada, G. (2011). The Impact of Customer Retention Strategies in the South African Cellular Industry: The Case of the Eastern Free State. *International Journal of Business, Humanities and Technology*, 1(2), 52–60.
- Moon, J. (2013). The tangibility and intangibility of e-service quality. *International Journal of Smart Home*, 7(5), 91–102.
- Musa, G., Doshi, R., Wong, M., & Thirumoorthy, T. (2012). How satisfied are inbound medical tourists in Malaysia? A study on private hospitals in Kuala Lumpur. *J. Travel Tourism Mark*, 29, 629–646.
- Namkung, Y. & Jang, S. (2007). Does food quality really matter in restaurant: its impact of customer satisfaction and behavioral intentions? *Journal of Hospitality and Tourism Research*, 31(3), 387–410.

- Nodstokke, D., & Zumbo, B. (2010). A New Nonparametric levene test for Equal Variances. *Psicologica*, 31, 401-430.
- Oliver, L. (2010). Satisfaction: A Behavioral Perspective on the Consumer. Routledge. Pareigis, New York, NY.
- Parasuraman, A., Zeithaml, A., & Berry, L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64 (Spring), 12–37.
- Parasuraman, A., Zeithaml, A., & Berry, L. (2001). Refinement and reassessment of the SERVQUAL scale. *Journal of Marketing*, 67(4), 423–450.
- Prebensen, K., Woo, E., & Uysal, S. (2014). Experience value: antecedents and consequences. *Curr. Issues Tourism*, 17(10), 910–928.
- Ryu, K. & Han, H. (2010). 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*, 34(3), 310-329.
- Ryu, K., Lee, R., & Kim, G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223.
- Soriano, R. (2002). Customers' expectations factors in restaurants: The situation in Spain. *International Journal of Quality and Reliability Management*, 19(8/9), 1055–1068.
- Su, L. & Hsu, R. (2013). Service fairness, consumption emotions, satisfaction, and behavioral intentions: the experience of Chinese heritage tourists. *Journal of Travel and Tourism Marketing*, 30(8), 786-805.
- Trail, T., Anderson, F., & Fink, S. (2005). Consumer satisfaction and identity theory: A model of sport spectator conative loyalty. *Sport Marketing Quarterly*, 14(2), 98–111.
- Ueltschy, C., Laroche, M., Zhang, M., Cho, H., & Yingwei, R. (2009). Is there really an Asian connection? Professional service quality perceptions and customer satisfaction. *Journal of Business Research*, 62(10), 972–979.

- Wall, A. & Berry, L. (2007). The combined effects of the physical environment and employee behavior on customer perception of restaurant service quality. *Cornell Hotel and Restaurant Administration Quarterly*, 48(1), 59–71.
- Walter, U., Edvardsson, B., & Öström, Å. (2010). Drivers of customers' service experiences: a study in the restaurant industry. *Managing Service Quality*, 20(3), 236-258.
- Wei, Y. & Huang, Y. (2013). The Impact of Food Quality on Foodservice Satisfaction at International Conferences. *Journal of Convention & Event Tourism*, 14, 252-269.
- Wu, H. & Liang, D. (2009). Effect of experiential value on customer satisfaction with service encounters in luxury-hotel restaurants. *International Journal of Hospitality Management*, 28(4), 586–593.
- Yi, Y. & Gong, T. (2008). The effects of customer justice perception and affect on customer citizenship behavior and customer dysfunctional behavior. *Ind. Mark. Manage*, 37(7), 767–783.
- Yoshida, M. & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338–361.
- Yuksel, A. & Yuksel, F. (2003). Measurement of tourist satisfaction with restaurant services: A segment-based approach. *Journal of Vacation Marketing*, 9(1), 52–68.
- Zeithaml, V. (1988). Consumer perceptions of price, quality and value: A mean-end model and synthesis of evidence. *Journal of Marketing*, 52, 2–22.
- Zeithaml, V. & Bitner, J. (2003), *Services Marketing: Integrating Customer Focus across the Firm*, McGraw-Hill, New York, NY.