

# Factors Affecting Guest Perceived Service Quality, Product Quality, and Satisfaction—A Study of Luxury Restaurants in Ho Chi Minh City, Vietnam

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**Abstract**—This study was conducted to examine the direct and indirect impacts of the factors of SERVQUAL model; tangibles, reliability, responsiveness, empathy, and assurance together with other factors of price, authenticity, and meal pace on guest satisfaction of luxury restaurants in Ho Chi Minh City through the mediation of factors of service quality and product quality. The empirical results provided a general view about customer's assessment about product quality or food quality and service quality of luxury restaurants. In addition, this study also argued that, to achieve higher guest satisfaction level, luxury restaurateurs should focus more on the improvement of their service quality, product quality, assurance, responsiveness, empathy, and reliability of staff, offer better price and pre- and in meal pace process. On the other hand, despite having no direct effect on guest satisfaction, tangibles dimension and activities of post meal pace process contributed an important indirect impact on guest satisfaction.

**Index Terms**—guest satisfaction, luxury restaurant, perceived service quality, perceived product quality

## I. INTRODUCTION

Nowadays, with the higher living standard, having dining in restaurants is not unfamiliar with Vietnamese, even it become a culture in great urban such as Ho Chi Minh City and Ha Noi capital. Guests come to restaurants not only for eating and drinking but also for their business, their celebration, etc. No matter what business the owners are in, they always find ways to attract customers to their establishments. Retaining customers is important; it costs three or five times as much to attract a new customer as it does to retain an old customer [1]. About 80% profit business get coming from 20% loyal customer. Therefore, the big issue for business is how to make customers repurchase product or service and become loyal customers. Based on the finding of many previous authors about the relationship between customer satisfaction and loyalty [2] and [3], it can be concluded that one of best way to have loyal customers is satisfying the existing customer. Consumer satisfaction is

considered a heart of marketing, an essential indicator for evaluating corporate performance because of the close relationship between it and corporate profit [4] and [5]. On the other hand, a satisfied customer will exhibit positive word-of-mouth [6] and [7] which is “one of the most important factors to acquiring new customer” [8].

Ho Chi Minh City, known as—Far East Pearl, has over 10 million people and is center of economic, culture and education of Vietnam. This destination provides many different kinds of restaurants from fast-casual restaurants, casual-dining restaurants to luxury restaurants which offer different types of special food and beverage of different countries such as: Japan, Korea, India, Europe, China and so on. The battle for market share in the restaurant industry is intensive [9] in the U.S. and that is also true in Vietnam with more and more restaurants opened each year. Guest come to restaurant not only enjoy aromatic flavor of food and beverage but also enjoy service quality; how the guests served, style of restaurants, etc. The higher price customers pay when they eat in restaurant, the higher the demand they request about service quality and product quality. Therefore, it is more difficult for luxury restaurant's owners to develop and improve their restaurants to satisfy the customers when they always deal and serve the choosy guests who can pay high for a meal; however they require perfection for everything. Indeed, Customer is considered as King because customer is who makes decision whether a restaurant can continue to open and do business or not. In the hard race of conquering customer in order to persuade them purchase and repurchase a product of restaurant, restaurateurs always try to develop, modify and renovate service quality and product quality through defining factors that lead to guest satisfaction.

## II. LITERATURE REVIEW

### A. Luxury Restaurant

The word “luxury” comes from the Latin word “Lexus” which means rankness, excess, debauchery, also richness, abundance. Besides that, the word luxury also describes ways of behavior, expenditure, and products

considered as exceeding necessary and sensibility. In today's day and age, the idea of luxury is usually associated with exclusive and expensive brands. According to [10], they define luxury restaurant is a place where provide full service of food and beverage and with expensive price, high quality food and service, and distinguished physical environment such as stylish décor, pleasing or fancy atmosphere, etc.

#### B. Guest/Customer Satisfaction

Reference [11] first denoted customer satisfaction as a related psychological state to appraise the reasonableness between what consumer actually gets and gives. Customer satisfaction as a psychological state when there is an existing discrepancy between emotion and expectation [12]. Reference [13] assumed guest satisfaction as a consumer's fulfill response. It is a judgment that a product or service feature providing a pleasurable of consumption related fulfillments. Thus, guest satisfaction towards restaurants is an assessment whether the service and product quality meets their needs and expectation involved.

#### C. Perceived Service Quality

The service defines a commodity as intangible including the performance of certain work or effort, and usually is offered through the effort of people or a mechanical effort to a certain person [14]. Reference [15] defined service quality is difference between customer expectation of service providers and their assessment of the actual service or [16] cited service quality is customer's judgment about the excellence or superior of service. Service quality is not only considered as a tool for revenue streams but also become to the most important competitive factor in business world which has been offered some metaphors such as the most powerful competition weapon [17], the organization's life-giving blood [18].

Based on the gap of the theory of service quality, [19] developed SERVQUAL as an instrument to measure service quality consisting of ten determinants: tangible, reliability, responsiveness, competence, courtesy, credibility, security, accessibility, communication and understanding the customer. The ten factors were then simplified and reduced into five factors which are tangibles, reliability, responsiveness, assurance and empathy.

SERVQUAL has been received many criticism from the other authors. The first question is about the validity of SERVQUAL in measure the expectation of customer in service place where there are many people who just come there in the first time and their expectation is not realistic [20]. Reference [21] and [22] contended it depends on the field of research in which the dimensions of SERVQUAL are applied because the definitions and the number differ. It can be said that, SERVQUAL is open model and flexible which can be applied for different industry. There are varieties of research conducted in hospitality industry using the SERVQUAL model. The effectiveness of SERVQUAL in studying service quality in hospitality industry has been well

demonstrated by several researchers [23] and [24]. On the other hand, the items for measuring the variable of tangibles in this research were a combination of the items of DINESCAPE [25] and items of tangibles in PERSERQUAL [26] for evaluating physical evidence of luxury restaurants in Ho Chi Minh City.

#### D. Perceived Product Quality

[27] and [28] defined product quality is all of characteristics and features of product satisfying given needs. Perceived product quality in restaurants is assessed by evaluating of customer about actual product (meal or food quality) and place where meal or food is delivered (physical environment). However, the "physical environment and equipment" was similar to the tangible dimension proposed by Parasuraman, Zeithaml, and Berry in 1988 [29]. Therefore, this research focuses on food quality as a measurement for the mediating variable of perceived product quality influencing guest satisfaction when guests dine in a luxury restaurant.

Reference [30] stated three components of measuring food quality: safety, appeal, dietary acceptability and found that food quality is the most important factor affecting on guest satisfaction compared with the other aspects of restaurant including physical environment and service quality. Another research model proposed by [31] tested the impact of food quality on guest satisfaction and their behavioral intention. This research found a linkage between food quality and guest satisfaction as well as behavioral intentions. They selected presentation, menu item variety, healthy options, taste, freshness, and temperature to assess food quality. Reference [32] used food presentation, menu design, serving size to measure product quality or food quality in the foodservice industry. This research adopts measuring items from the previous mentioned researches, hence, the factor food quality will be evaluated by: tastiness of food, food variety, menu design, food safety, food serving size, and food presentation.

#### E. Price

Reference [33] not only considered price as a multidimensional variable consisting of objective price, monetary price and sacrifice, but also defined defines price as something, customer have to give up or scarify to obtain kinds of product and service. [34] noted that price is the amount of money customer has to pay for the benefits that they get from the product or service.

Economists have aware of the concept of judging quality by price. For instance, reference [35] stated that price is an important element of consumer's purchase; therefore it has large influence on consumers' satisfaction judgment. Today, the word "expensive" has come to connote "quality" in the mind of the consumer. The two concepts have almost become synonymous. The perception of price as an indicator of product is basically rational. It indicates a trust in the forces of supply and demand and is based on the assumption that prevailing market prices exist because they were found to be fair and reasonable [36].

### F. Meal Pace

According to [37], the goal of revenue management is maximizing revenue by the way of variable pricing and duration control. Revenue management has applied in services that are sold to customer for a fixed amount of time.

Meal pace can be understood as the duration of meal experience which begins when customer are seated in restaurant's table and ends when restaurant vacate the table. Research on waiting time has also shown that customer's reaction to wait for service depends on the stage of experience. Dining experience can be broken into three main stages: (1) preprocess stage; (2) in-process stage; and (3) post-process stage [38] in which preprocess stage extends from a customer who arrive at restaurant until he or she receive the first food course; in-process stage involves placing order and consuming meal; post-process begins with check settlement and ends when customer leaves.

With the mentioned independent variables and mediating variables related to guest satisfaction above, this study hypothesizes that:

- H<sub>1</sub>: Perceived service quality and perceived product quality affect guest satisfaction.
- H<sub>2</sub>: Factors of tangibles, reliability, responsiveness, empathy, assurance, price, authenticity, and meal pace affect perceived service quality.
- H<sub>3</sub>: Factors of tangibles, reliability, responsiveness, empathy, assurance, price, authenticity, and meal pace affect perceived product quality.
- H<sub>4</sub>: Factors of tangibles, reliability, responsiveness, empathy, assurance, price, authenticity, and meal pace affect guest satisfaction.
- H<sub>5</sub>: Guest satisfaction is indirectly affected by factors tangibles, reliability, responsiveness, empathy, assurance, price, authenticity, and meal pace through the mediation of perceived service quality and perceived product quality.

## III. METHODOLOGY

### A. Research Methodology and Sample

This research applied quantitative approach which dealt with statistical, mathematical, and computational techniques.

Respondents of this research were chosen from the Ho Chi Minh City population who dined in luxury restaurants in Ho Chi Minh City. In this study, there were 52 measured items measuring the independent variables including tangibles, reliability, responsiveness, empathy, assurance, price, authenticity, and meal pace and 20 items measuring the dependent variables of perceived service quality, perceived product quality, and guest satisfaction. In order to ensure the validity and reliability of the research variables, the sample size of this research was 360 (n = 360) with the ratio of 7:1.

### B. Research Instrument and Data Collection

The research questionnaire design was mainly based on the 5-point Likert scale items where 1 = strongly

disagree; 2 = disagree; 3 = neutral; 4 = agree and 5 = strongly agree. The second part of questionnaire included questions about the demographic information.

**Data Collection:** Researcher came and asked for luxury restaurant manager's permission to deliver questionnaires to guests in restaurants. If researchers got the permission of the managers, then questionnaires would be directly delivered to guests with directions to help them provide correct answers.

### C. Factor Analysis and Reliability

Two exploratory factor analyses were conducted using the principal component extraction method and varimax rotation of 20 measured items of the group of dependent variables of guest satisfaction, perceived service quality, and perceived product quality and 52 items of the group of independent variables related to the factors influencing guest satisfaction. The data was screened by examining the descriptive statistics on each item before running the analysis with the SPSS. In this study, the factor analysis procedure was applied twice; once for the group of independent variables with 8 variables, and again for the group of dependent variables, including 3 variables. According to [39], to be significant, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value has to be .60 or above. As the results, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was .856 for the group of independent variables and .777 for the group of dependent variables that above the value of .60, indicating that the present data was suitable for principal components analysis. Similarly, Bartlett's test of sphericity [40] was significant ( $p < .001$ ), indicating sufficient correlation between the variables to proceed with the analysis.

TABLE I. SUMMARY OF INDEPENDENT VARIABLES WITH RELIABILITY COEFFICIENTS

Given name	Number of items	Alpha
Meal pace Pre and In-process (PRENIN)	5	.831
Meal pace Post-process (POSPRO)	4	.830
Assurance (ASSUR)	4	.784
Price (PRICE)	4	.797
Responsiveness and Empathy (RESNEM)	4	.750
Tangibles (TAN)	4	.701
Reliability (RELIA)	3	.713

Using the Kaiser-Guttman's retention criterion of Eigenvalues greater than 1.0, only seven components have Eigenvalue that were greater than 1. These seven factors accounted for 64% of the total variance. There was a merge of responsiveness and empathy variables into a new variable named responsiveness and empathy in this study. There was also a separation of Meal pace variable into two factors of meal pace pre-and-In-process and meal pace post-process. The Cronbach's coefficients ranged from .701 to .831 among the seven factors indicating good subscale reliability as shown in Table I above.

Additionally, a three-factor solution provided clearest extraction for the group of dependent variables including 20 items. These three components accounted for 52.3%

of the total variance. The Cronbach's coefficients ranged from .784 to .831 among the three factors indicating good subscale reliability as shown in Table II below.

TABLE II. SUMMARY OF DEPENDENT VARIABLES WITH RELIABILITY COEFFICIENTS

Given name	Number of items	Alpha
Perceived Product Quality (PERPROQUA)	5	.831
Guest satisfaction (GUESATIS)	5	.830
Perceived Service Quality (PERSERQUA)	3	.784

The present seven-factor model and three-factor model of this study were deemed the best solution because of their conceptual clarity and ease of interpretability.

#### IV. RESULT

##### A. Characteristics of Respondents

TABLE III. DEMOGRAPHIC

	Frequency	Percentage
Gender		
- Male	176	48.9
- Female	184	51.1
Total	360	100.0
Marital Status		
- Single	176	48.9
- Married	184	51.1
Total	360	100.0
Age		
- 18-25	42	11.7
- 25-35	154	42.8
- 35-45	110	30.6
- 45-55	46	12.8
- >55	8	2.2
Total	360	100.0

##### B. Factors Affect Guest Satisfaction

Pearson Product-moment Correlation Coefficients ( $r$ ) were employed in order to find out which factors had relationship with guest satisfaction variable.

TABLE IV. CORRELATIONS OF THE GUESATIS MODEL

	GUES ATIS	1	2	3	4	5	6	7	8
PRENIN	.547*								
POSPRO	.347*	.503*							
ASSUR	.434*	.333*	.386*						
PRICE	.499*	.406*	.237*	.317*					
RESNEM	.570*	.512*	.232*	.341*	.373*				
TAN	.314*	.341*	.395*	.347*	.237*	.235*			
RELIA	.503*	.370*	.281*	.513*	.321*	.400*	.377*		
PERPROQUA	.331*	.212*	.202*	.418*	.419*	.147*	.253*	.285*	
PERSERQUA	.375*	.284*	.451*	.339*	.208*	.172*	.476*	.336*	.373*
Mean	3.70	3.73	4.01	3.96	3.59	3.38	3.87	3.69	4.01
SD.	.482	.534	.563	.555	.609	.569	.506	.502	.481

Note: \* Significant level at  $p < .001$

Table IV shows that there were significant relationships between dependent variable of guest satisfaction (GUESATIS) and all independent variables. There were substantially positive correlations between PRENIN and GUESATIS ( $r = .547$ ,  $p < .001$ ), RESNEM

and GUESATIS ( $r = .570$ ,  $p < .001$ ), and RELIA and GUESATIS ( $r = .503$ ,  $p < .001$ ) that means the better service activities in meal pace preprocess and in-process leaded the higher guest satisfaction in luxury restaurants. Furthermore, the variables of POSPRO, ASSUR, PRICE, TAN, PERPROQUA, and PERSERQUA were moderately correlated with GUESATIS ( $r = .347$ ,  $p < .001$ ), ( $r = .434$ ,  $p < .001$ ), ( $r = .499$ ,  $p < .001$ ), ( $r = .314$ ,  $p < .001$ ), ( $r = .331$ ,  $p < .001$ ), and ( $r = .375$ ,  $p < .001$ ) respectively. That means the better services in the meal pace post-process, assurance, price, tangibles, perceived product quality, and perceived service quality also leaded to the higher level of guest satisfaction.

In order to explore the direct effects of the independent and intervening variables on the guest satisfaction, the result of multiple regression analyses showed that the guest satisfaction was directly affected by PERSERQUA ( $\beta = .252$ ,  $p < .001$ ), RESNEM ( $\beta = .229$ ,  $p < .001$ ), PERPROQUA ( $\beta = .222$ ,  $p < .001$ ), RELIA ( $\beta = .183$ ,  $p < .001$ ), PRENIN ( $\beta = .177$ ,  $p < .001$ ), PRICE ( $\beta = .171$ ,  $p < .001$ ), and ASSUR ( $\beta = .078$ ,  $p < .050$ ). This means that every 1-standard deviation increase in perceived service quality, responsiveness and empathy, perceived product quality, reliability, meal pace pre-and-in-process, price, and assurance ( $\beta = .078$ ,  $p < .050$ ) would lead to an increase in guest satisfaction by .252, .229, .222, .183, .177, .171 and .078 units respectively when other factors were kept unchanged.

##### C. Factor Analysis and Reliability

The indirect effect of an independent variable on the dependent variable through the intervening variable was the total product of the effects of that independent variable on the intervening variables and the effect of the intervening variable on the dependent variable of guest satisfaction [41].

###### 1) Perceived service quality

As the result of multiple regression analysis of the group of independent variables and the dependent variable of PERSERQUA, the factors of tangibles, meal pace post-process, and reliability significantly affect PERSERQUA with ( $\beta = .336$ ,  $p < .001$ ), ( $\beta = .280$ ,  $p < .001$ ), ( $\beta = .131$ ,  $p < .001$ ), respectively. Meanwhile, PERSERQUA significantly affected GUESATIS with ( $\beta = .252$ ,  $p < .001$ ). Therefore, the factors of tangibles, meal pace post-process, and reliability created an indirect effect on guest satisfaction through mediating variable of perceived service quality at (.085), (.033), and (.033), respectively.

###### 2) Perceived product quality

The result of multiple regression analysis between the group of independent variables and PERSERQUA indicated the factors of assurance, price, and responsiveness and empathy significantly affected PERSERQUA with ( $\beta = .226$ ,  $p < .001$ ), ( $\beta = .226$ ,  $p < .001$ ), ( $\beta = -.096$ ,  $p < .001$ ), respectively. In addition, GUESATIS was significantly affected by PERSERQUA with ( $\beta = .222$ ,  $p < .001$ ). Therefore, the factors of assurance, price, and responsiveness and empathy created an indirect effect on guest satisfaction through mediating

variable of perceived product quality at (.059), (.059), and (-.021) respectively.

#### D. Path Diagram of Guest Satisfaction

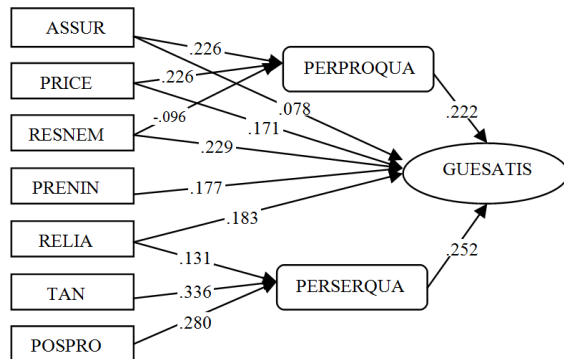


Figure 1. Path coefficients of the GUESATIS model.

**Note:** All coefficients in the model were significant at the .05 level.

The path analysis was performed to find out the direct and indirect effects of the independent variables on the dependent variable of this research. The total effect of one variable on GUESATIS can be divided into direct effects and indirect effects. The direct effect of an independent variable on the dependent variable of GUESATIS is a standardized regression coefficient (beta) and is considered as a path coefficient in the path model.

#### E. Significance of Indirect Effects

Table V showed the results of the bootstrapping method recommended by [41] to test the significance of indirect effects or mediations. The output provided the bootstrapped confidence intervals (at the 95%). If there is a ZERO (0) lies within the interval range between the lower boundary (LL) and the upper boundary (UL), then we can conclude that, with 95% confidence, there is no mediation or indirect effect. On the other hand, if zero does not occur between the LL and the UL, then we can conclude that, with 95% confidence, the mediation or indirect effect is significant [42]. As can be seen in the output of Table V, the indirect effects of ASSUR, PRICE, RESNEM, RELIA, TAN, and POSPRO on GUESATIS through the mediation of PERPROQUA and PERSERQUA were estimated to lie between 0.0261 and 0.1168, 0.0126 and 0.0933, 0.0106 and 0.0657, 0.0379 and 0.1223, 0.0765 and 0.1969, and 0.0576 and 0.1701 with 95% confidence, respectively. Because zero is not in the 95% confidence interval, we can conclude that the indirect effects were indeed significantly different from zero at  $p < .05$  (two tailed) and the mediations of PERPROQUA and PERSERQUA in this study were true.

#### F. Total Causal Effects on Guest Satisfaction

Table V summarizes the effects of the independent variables together with perceived product quality and perceived service quality on the dependent variable of guest satisfaction. Regarding the total effect, it's clear that PERSERQUA ( $\beta = .252$ ), PERPROQUA ( $\beta = .222$ ), RESNEM ( $\beta = .250$ ), PRICE ( $\beta = .230$ ), PRENIN ( $\beta = .177$ ), ASSUR ( $\beta = .137$ ), and RELIA ( $\beta = .216$ ) have

low moderated effects on GUESATIS. The total effect of these factors on guest satisfaction was 1.602.

TABLE V. INDIRECT AND TOTAL CAUSAL EFFECT

Variables	Causal Effects			LL	UL
	Direct	Indirect	Total		
ASSUR	.078	.059	.137	.0261	.1168
PRICE	.171	.059	.230	.0126	.0933
RESNEM	.229	.021	.250	.0106	.0657
RELIA	.183	.033	.216	.0379	.1223
TAN	-	.085	.085	.0765	.1969
POSPRO	-	.033	.033	.0576	.1701
PRENIN	.177	-	.177		
PERPROQUA	.222	-	.222		
PERSERQUA	.252	-	.252		
Total	1.312	.290	1.602		

## V. DISCUSSION AND RECOMMENDATIONS

### A. Perceived Service Quality and Product Quality

As a results shown in Table IV, it's clear that perceived product quality ( $r = .331$ ,  $p < .001$ ) and perceived service quality ( $r = .375$ ,  $p < .331$ ) were positively correlated with guest satisfaction. The results also showed that the higher service and product quality led to higher level of guest satisfaction. These results were consistent with many previous studies identifying the relationship between perceived service quality, perceived product quality and guest satisfaction [29]-[31], [43]. According to the regression analysis, service quality and product quality were found to directly influence to guest satisfaction. From that, some recommendations for restaurant will be given.

Luxury restaurant owners and managers should concentrate on enhancing service quality in luxury restaurants because it is the factor which directly affects guest satisfaction. In order to improve the first item of service quality which regard to the facilities of luxury restaurant, the owners should equip their restaurants with high quality and aesthetic facilities.

In addition, physical environment also plays an important role in making decision to choose a restaurant due to reasons for dining. For example, restaurant has romantic physical environment will be the best choice for love couple or family dining on special occasion; restaurants with the décor formal, courteous can be the best choice for business man who want to find a place for dining with their partner, their important customers, etc.. Therefore, a restaurant physical environment should be decorated with a completely penetrated stylish idea but still suitable with variety of guests' dinning reasons. For instance, a restaurant can be decorated with the peaceful and mild atmosphere of Northern Europe countries; however, there are special areas that serve for each guest' dinning reasons. On the other hand convenience level is also a concern of guests. Guests prefer eating in a restaurant with convenient location rather than trying to look for a special restaurant with the location which is difficult to find. From that, restaurant owners should pay

attention to the area they want to allocate their restaurants. They should hire places which are easy to find with many people who live and work nearby. One more thing, the décor of restaurant's atmosphere should be appropriate with the foods restaurant provides. It means that if restaurant specialize in Japanese foods, the décor should have color of Japan. Some guests in Ho Chi Minh City complained that they sometimes have dining in Italian restaurants, Japanese restaurants, Korean restaurants, etc; however they find difficult to see facilities or accessories that have special color of a country.

Secondly, the product that restaurants deliver to guest is primary foods. Appetizing is the first criteria to evaluate a dish. Restaurant's owner, manager, chef have to find ways to modify, adjust and enhance the taste of foods more and more to satisfy all guest's taste for both local guests and guests coming from other places. Food serving size and sanitary should also be paid attention. One way to know the opinion of guests, restaurant can design a small measurement with some questions about foods of restaurant. Then, give it to guests when they finish meal and wait for payment.

Moreover, according to some comments of guests, restaurants should invest to develop more new foods and special foods of restaurant. That means there are some foods, customers just enjoy if only they come to a particular restaurant. The special foods will remind guest to remember a restaurant's name as well as attract guest to come back with more people.

#### *B. Independent Variables*

According to the results, assurance had direct impact on both perceived product quality and guest satisfaction. Moreover, these findings indicated not only the existence of a negative effect of responsiveness and empathy on perceived product quality at the  $\beta = -.096$  but also direct effect on guest satisfaction with the  $\beta = .229$ . Comparing with the results of the research of [44] that concluded in their research that "responsiveness" a dimension of service quality was the most important to customers with the attributes of employees including whether employees were prompt, courteous, knowledgeable, helpful, understand customer's needs, attentive, and neat in appearance, it's easy to find out some resemble attributes, although, the factor responsiveness and empathy were merged into the only one factor of responsiveness and empathy. Responsiveness and empathy was one of the factors providing strongest effect on guest satisfaction with  $\beta = .250$  just less than perceived service quality. With the negative effect, responsiveness and empathy contributed a part of prediction of guest satisfaction through the mediation of perceived product quality. Guests perceived that restaurants employees did not perform well enough. The employees might not understand well guest's need, their queries about restaurant's service as well as foods. Some objectives reasons such as rush hour, crowded customers, or lack of employees that caused the employees' late response to guest's requests. Another reason which led to the negative impact of responsiveness and empathy of the

employees might be the language barrier when the restaurant's employees communicate with foreign guests using their second languages. They might not understand clearly what guest say and did not have enough foreign language skills to explain clearly and deeply to guest about restaurant's special foods, drinks as well as service. Furthermore, the empirical results illustrated that preprocess stage and in-process stage had direct impact on guest satisfaction, even though they were merged into one factor. Post-process did not affect to guest satisfaction directly; nevertheless, they provided direct effect on perceived service quality and contributed an indirect impact on guest satisfaction which was supported by [45] who found that the perception of respondents about the pace of dining experience affected their satisfaction. Their results also indicated that the guests had greater tolerance for the fast pace in the post-process stage rather than pre-process and in-process stage. In addition, customers in fine-dining restaurants are more sensitive with the meal pace than the ones in other kinds of restaurant.

Based on the empirical findings of this research, it is essential to develop an appropriate program and provide on-going training on the various attributes that guests concern such as: skills for serving, speeding up checking settlement, knowledge about foods, beverages, wines served in restaurant, experience, understand guest's specific needs, attentive to strengthen employee's ability and improve service quality as well as product quality of luxury restaurants. Moreover, it's necessary to encourage the employees to report and assess their performance themselves every week as well as restaurant's manager keep track their performance to have the directions to improve service quality of restaurant. Furthermore, it needs to have a prize or reward for the best employees in each month to commend their performance and motivate them continue to keep the achievements as well as impulse the other employee's effort. Besides that, in order to improve the meal pace activities, restaurateur can reduce efforts on post-process stage by speeding up check settlement and departure. The restaurateurs can use handheld devices for printing bill and process the credit or debit card at the table that save time for both restaurant's employees and guests.

Reference [44] also proved that price was an important factor in influencing guest satisfaction. However, the negative  $\beta$  value of price suggests that when the price is not in accordance with the customer's expectation, the satisfaction level declines. Fortunately, the result shown in this research of  $\beta$  value was positive for both direct and indirect effect on guest satisfaction towards luxury restaurants in Ho Chi Minh City. That means there is correlation between price and guest's expectation about both product and service quality. In order to make guests feel more satisfied, restaurant's manager and other department in restaurant management board should discuss and design closed/VIP guest programs which give discount for guest who come to restaurant regularly. The discount is also applied for guest who reserves the table for five people or more. Besides that some promotion

programs should be offered by restaurants to attract guests come. Although offering discount, the quality of products and services must continuously keep improved to motivate guests to recommend their friends, partner, and family to go to the restaurants.

Lastly, reference [46] found that reliability and tangibles affected service quality and guest satisfaction. However, with the standardized loadings value, the reliability is a little more important than tangibles that was contrast with the result of this study that provided reliability with  $\beta = .131$  which is smaller than tangibles with  $\beta = .336$ . According to the result of the research, tangibles in restaurant are evaluated based on background music, lighting, kind of payments and table settings. Although they have no direct impact on guest satisfaction, they played a crucial part in perceived service quality. Comfortable lights, enjoyable music and right dining hall temperature can make a guest comfortable [32]. To enhance the level of guest satisfaction, restaurateurs should conduct a small survey or ask guest's opinion to modify, adjust music background, lighting, table settings as much suitable as possible.

## VI. CONCLUSIONS

All of research objectives have been obtained. At first, identify which factor had effect on perceived service quality, perceived product quality and guest satisfaction. Secondly, evaluate the direct and indirect effects of the independent variables on main dependent variable of guest satisfaction through perceived service quality and perceived product quality. Then, give recommendations for luxury restaurants in order to improve service quality and product quality better and better.

The applications of multivariate statistical techniques allow researcher to exert the causal relationship between variables of the model with factor analysis, multiple regression analysis, and path analysis. Based on the review of literature and empirical findings of this research, the explanations and suggestions were given. Bivariate correlations and Pearson product-moment correlation coefficients were used to explore that relationship and its strength between each independent variable and guest satisfaction as well as between guest satisfaction and mediating variables of perceived service quality and perceived product quality. The direct and indirect impacts were also discussed and explained in order to reach all of research objectives and had evidence for hypotheses. Generally, this research gives theoretical and practical results that contribute to the field of consumer behavior and customer relationship management.

Future researchers should consider other important factors that create guest satisfaction or satisfy the guests whose main purpose to transact their business or to enjoy time with their cherished people (family, friends, spouse, etc.) rather than assuming the primary reasons for guests coming to luxury restaurant are for their meals.

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