DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft ZBW – Leibniz Information Centre for Economics

Ibarra Morales, Luis Enrique; Velázquez, Jesús; Partida, Lourdes et al.

Article

Quality service and its relation with global satisfaction in fast food consumers : a case Study

Expert journal of business and management

Provided in Cooperation with:

Expert Journal of Business and Management

Reference: Ibarra Morales, Luis Enrique/Velázquez, Jesús et. al. (2015). Quality service and its relation with global satisfaction in fast food consumers: a case Study. In: Expert journal of business and management 3 (2), S. 119 - 128.

This Version is available at: http://hdl.handle.net/11159/2751

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: rights[at]zbw.eu https://www.zbw.eu/

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte. Alle auf diesem Vorblatt angegebenen Informationen einschließlich der Rechteinformationen (z.B. Nennung einer Creative Commons Lizenz) wurden automatisch generiert und müssen durch Nutzer:innen vor einer Nachnutzung sorgfältig überprüft werden. Die Lizenzangaben stammen aus Publikationsmetadaten und können Fehler oder Ungenauigkeiten enthalten.

https://savearchive.zbw.eu/termsofuse

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence. All information provided on this publication cover sheet, including copyright details (e.g. indication of a Creative Commons license), was automatically generated and must be carefully reviewed by users prior to reuse. The license information is derived from publication metadata and may contain errors or inaccuracies.



Quality Service and its Relation with Global Satisfaction in Fast Food Consumers. A Case Study

Luis Enrique IBARRA MORALES*, Jesús VELÁZQUEZ, Lourdes PARTIDA, Cinthia FRANCO

Sonora State University, Hermosillo, Sonora, México

The present study analyzes the quality service perception and its relation with the satisfaction for the fast food consumers of hamburgers' sector of the chain Burger King in Hermosillo, Sonora. By the application of Servperf of Cronin and Taylor methodology and a data regression method, through the coefficient of determination (R^2) was determined that the independent variables explain the variability or variance of 82.9% in consumer satisfaction and that the explanatory variable which has the most influence in absolute value over the explained variable is reliability, due to its standardized beta is 0.301, being the highest score among the variables. To achieve the objective of this study, a quantitative and correlation investigation was designed, where data was collected from a survey structured by five dimensions, measured by 22 items. It was applied to a random and representative sample of 385 consumers, with a 95% level confidence and a ±5% of permissible error. An inferential statistical analysis allowed observing a positive relation between consumers' satisfaction level and quality service. The results showed that Servperf is a valid instrument with psychometric characteristics of high reliability that makes it appropriate to measure quality service. The same way, it was observed an index of service global satisfaction of 69.27%, which according to the scale used implies clients are satisfied with the received service.

Keywords: quality service, consumers, satisfaction, Burger King, Servperf

JEL Classification: C10, M10, M30, M31

1. Introduction

Nowadays, the quality term is applied and defined, as well as in the industrial sector as in the service sector, with all the properties, characteristics or qualities of a product or service to satisfy the implied preferences of consumers or users (Kotler, Bowen, Makens, 2005). According to Cantú (2006), quality has

Luis Enrique Ibarra Morales, Sonora State University, School of International Trade, Hermosillo, Sonora, México

Article History:

Received 24 June 2014 | Accepted 5 August 2015 | Available Online 10 August 2015

Cite Reference

Ibarra Morales, L.E., Velázquez, J., Partida, L., Franco, C., 2015. Quality Service and its Relation with Global Satisfaction in Fast Food Consumers. A Case Study. *Expert Journal of Business and Management*, 3(2), pp.119-128

^{*} Corresponding Author:

had a long evolution that gives a great complexity to the concept itself, due to the existence of a variety of criteria and points of view that can be applied to the service sector.

On the other hand, the service offered by the food sector, especially the franchises dedicated to the commercialization of hamburgers, must build a fundamental pillar in its corporative and functional business model strategy. This implies having guaranteed, not only the sales income but going further by assuring that the products and service offered, represent the satisfaction of consumers' needs, preferences and demands; or in other words, the quality perception.

Clients' satisfaction nature is based, according to Lucas Arocas (2000), on the evaluation that the clients make of the service's attributes when it is offered or provided, which corresponds to a purely cognitive process. Setó (2004) considers it is important to include the customers' needs as an affective-cognitive process to the models or groups of attributes indicated in the literature.

In this investigation, an analysis of quality service is performed upon the basis of a measure scale and having as a case study the Burger King franchise, company of the fast food sector, specifically hamburgers, in the city of Hermosillo, Sonora, México.

The approach used to measure the quality service and the global satisfaction of this branch's clients, was the one designed and proposed by Cronin and Taylor (1992), Service Performance (Servperf). The model is based on the performance, and this is the reason why it only considers the consumer's perception as the producer of the satisfaction dimension. The Servperf instrument uses the same attributes of the Servqual Method, designed and proposed by Parasuraman, Zeithlaml and Berry (1988).

Servperf is based on the following five dimensions: tangible –the physical environment represented by visual elements, communication and facilities' comfort; reliability –the service is provided with responsibility and precision; responsiveness –the company's willingness to offer an efficient and fast service; assurance –diverse elements that provide reliability and assurance to customers; and finally, empathy – company's ability to offer each client a personalized service.

2. Literature Review

Different studies have tried to define, measure and explain the concept of quality service and customer satisfaction (Cronin and Taylor, 1994; Parasuraman et al., 1985; 1988; 1991; Teas, 1994); however, these two terms have been considered as synonyms; are used interchangeably, which has provoked a major complexity at the time of studying quality in the service.

On one hand, the quality in the service promotes clients' satisfaction, the desire of coming back and developing certain loyalty to a certain service or brand; while on the other hand, the concept of satisfaction and quality service are closely related, to the point that these two constructs tend to be confused and overlapped.

2.1. Quality Service

There is not a unique definition for quality service, neither a unique manner to be measured. Quoting some authors and approaches, for Jain and Gupta (2004) service quality can be seen as continuity between "ideal quality" and "totally unacceptable quality". For Stevens et al. (1995) it is the customer's perception about the superiority in the service received, containing two great dimensions, the intangibles –perceived as the attention offered by the personnel, and the tangibles –as the physical facilities or personnel appearance. On the other hand, for Chao (2008) quality service can be conceptualized in the form of four attributes: personnel, operation, physical appearance, and merchandise.

In general terms, the two most common manners of measuring the perception of service quality is by asking the consumers to express their opinion about the quality received when a product or service is given at a certain moment (Oh, 1999). The other one tends to be the predominant in literature, and is the Servperf items designed (Cronin and Taylor, 1992), or any others derived from this instrument or the ones proposed by Parasuraman et al., (1988), in which the five dimensions of service quality are identified: tangible aspects (physical environment), reliability (accomplishment and consistency), responsiveness to customer's needs, offering assurance and empathy with customers.

The validity and reliability of the Servperf instruments have been tested in different service contexts, being an instrument widely used by researchers and academics. It is important to mention that the 22 items can be adapted or adjusted to the type of industry or service sector that will be analyzed, in order to avoid confusion or discrepancy at the moment of being applied to customers.

2.2. Elements that Constitute Customer Satisfaction

Customer satisfaction is basically composed by three elements: (a) perceived performance, defined as the result of the customers' perception in the performance achieved by the received service or product; (b) expectation, defined as the customers' assumption of receiving something, which can be the result of promises made by the company, of previous experience-related buys, people's opinions and promises made by the company; (c) satisfaction levels that are produced when the purchase or acquisition of a product or service is done, then the customer perceives one of these three levels of satisfaction: not satisfied —when customers' expectations are not fulfilled; satisfied —when the product or service received meets clients' expectations; and complacency —it is produced when perceived performance overpass customers' expectations; in that manner, a pleased customer will become a loyal client to a brand or a service due to an emotional affinity that overcomes a rational affinity.

2.3. Fast-Food Sector

The commercial activity has a great importance in México, independently of the different categories on the market, especially in the fast food sector, since the remarkable growth in the sector sales has been accelerated, as well as the amount of companies where this sort of products are promoted and commercialized.

The fast food market is constituted by companies, transnational ones as well as small ones, dedicated to the manufacturing of food consumption products; in that manner, since the 90s a turning point in public politics is marked, with the signing and implementation of the North American Free Trade Agreement (TLCAN by its acronym in Spanish) a process that began and allowed that transnational companies, including a diversity of franchises, to be inserted in the service sector dynamic. Burger King, as the rest of the franchises installed in México and the State of Sonora, is a chain of restaurants specialized in hamburgers. These types of franchises are characterized by their excellent service and quality in products, which are provided by food chains recognized worldwide.

Fast food restaurants offer the opportunity of ordering in the facilities or in a drive-thru, presenting an alternative of selection according to customers' preferences. Is well known that these companies invest great sums of money and time in the development and application of new services, products, techniques and equipment used or that will be used in the future. The Burger King Corporation, as other fast food restaurants, controls the processes of development and growth in each one of the franchises they administer.

As expected, each purchase can have as a result a good service received, which leaves a consumer with a high satisfaction level; or in the contrary, a consumer may experience negative perception of the received service.

2.4. Service Quality Dimensions in Mexican Restaurants

A restaurant is a commercial enterprise where a menu is offered, a service and quality attentions are provided within a cordial and varied styles environment. The term derives from the Latin *restaurare* that means recover or restore. According to Talavera (2009) a restaurant receives multiple names, according to the environment, type of food and the attention disposition.

The restaurant's industry must take into consideration that the activity includes a tangible side that is focused in the preparation of the food served and a non-tangible side, which is integrated by the customer. The importance in the service can be perceived in different manners among the consumers, who take into consideration other aspects that complement the activity, as the speed of service and dishes' vary. The activities include food preparation for immediate consumption, taking place within the facilities, with or without table service or outside the restaurant, (Anker and Batta, 2000).

Trujillo and Vera (2007), determined through a study that 25 variables constitute the quality service in México' restaurants industry, which are grouped by content similarity in six dimensions: facilities - how pleasant and comfortable the place is perceived; accessibility - how easy is to arrive to the restaurant; personnel, - how amiable and proficient personnel attend customers; environment - how pleasant is the atmosphere or the environment perceived in the establishment; food - how well prepared and portioned are the dishes; dependability and honesty - how often the customer receives the same service.

In Table 1 are shown the dimensions, variables and definitions that integrate the quality service in México. For this investigation, these factors were adapted or adjusted to each one of the dimensions of the Servperf measurement tool that was designed to be applied to the hamburgers sector consumers.

Table 1. Dimensions, variables and definitions of quality service

Dimension	Variable	Definition
Facilities	Internal and external appearance	Physical characteristics that the customer perceives at a
	(colors, design, decoration)	glance such as: colors, decoration and design.
	Comfort	Comfortable furniture and spaces.
	Cleanliness	Cleanliness in facility and tableware.
	Location	Easiness to reach the restaurant.
Accessibility	Parking Lot	Easiness and safe car parking.
	Payment alternatives	Payment alternatives and facilities
	Courtesy and welcome	Welcome greetings received by customers
	Proficiency and ability	Personnel's level of knowledge of the food.
Personal	Presentation	Personnel appearance.
	Promptness	Personnel level of proficiency to attend customers' needs.
		Perception of familiarity, needs' understanding, reliability,
	Empathy	attitude.
Environment	Audiovisual ambiance	Background music, TV programs.
	Lighting	Lighting according to the type if restaurant.
	Smells	Smells perception at the moment of arrival.
	Room temperature	Room's temperature is manipulated for more comfort.
	Aroma	Perception of a pleasant aroma.
	Variety	Options to choose.
Food	Taste	Food and beverages must have a pleasant taste.
	Presentation	Food visually attractive
	Food hygiene	Foods look clean and disinfected.
	Food freshness	Foods with a pleasant appearance and keeping its natural
		properties.
	Temperature	Foods with the proper temperature
	Prestige	Clients' perception of a restaurant with a prestige.
Consistency	Accomplishment	The clients received what they ordered and have in inventory
and Honesty		what is offered.
	Attention to complaints	Fast and adequate solution to client's complaints.

Source: Trujillo, A. and Vera, J. (2007). Factors that constitute service quality for Mexican consumers in restaurants. 42
Annual Assembly of CLADEA. Miami, U.S.A.

3. Methodology

The present investigation is based on the analysis of the global satisfaction index in hamburger for consumers, regarding the service quality provided by restaurant chain Burger King, which has a high participation in the industry and the fast food sector.

3.1. General Objective

To analyze the perception of quality service and its relation to the global satisfaction index that consumer's demand in the hamburgers' fast food sector, of the company Burger King in Hermosillo, Sonora.

3.2. Investigation Questions

The following two investigation questions were generated:

- 1. What is the level of satisfaction of Burger King's clients or customers?
- 2. What are the perceptions of the clients or customers about the service quality provided by Burger King for each evaluated dimension?

3.3. Hypotheses

For the purposes of this study, the following hypotheses were formulated:

H₀: The variables of tangibility, reliability, responsiveness, assurance and empathy do not predict the global satisfaction index in Burger King's quality service.

H₁: The variables of tangibility, reliability, responsiveness, assurance and empathy predict the global satisfaction index in Burger King's quality service.

3.4. Variables Identification

The following independent variables of the study were identified:

- (a) Tangible elements (X_1) , the appearance of physical installations, equipment and communication materials.
- (b) Reliability (X_2) , the ability to perform the service promised in a careful and reliable manner.
- (c) Responsiveness (X_3) , the willingness of employees to help the customers and carry out the service.
- (d) Assurance (X₄), the knowledge and care shown by the employees and their abilities to inspire credibility and assurance.
- (e) Empathy (X₅), individualized attention that the company offers to consumers through its employees.

The dependent and defined variable determined for this study was the service quality global satisfaction index, explained through the direct relation and importance order of independent variables.

4. Research Context

To reach the general objective of the study it was considered an investigation with a quantitative and documentary approach, as well as correlation, since the independent variables were analyzed and evaluated with five dimensions, and how they were related with the dependent variable, in order to obtain statistically significant results that allow the explaining the studied event.

Additionally, the investigation designed was a non-experimental type, since the study variables were not manipulated, but studied as they occurred in their natural context. Furthermore, it was a transversal investigation, considering that data was obtained in the timeframe from October to December of 2014.

4.1. Data Collection and Sample

The sample was composed by all the people, 18 years or older, that in the period of October to December of 2014 made at least one consumption in any of Burger King's establishments in Hermosillo, Sonora.

Taking into consideration the data from the 2010 Census of Population and Housing, applied by the Institute of Statistics, Geography and Informatics (INEGI by its acronym in Spanish) in Hermosillo live 468,765 persons with the characteristics mentioned above. From this data, a calculation for a simple random probability sample was realized.

According to Santesmases (2009) the sample calculation from a known and finite population is obtained from Formula 1. In this sense, the sample gave a result of 385 subjects, with a confidence level of 95% and a permissible error of $\pm 5\%$; which implied that 95% of the times that data was measure, it was in the interval of $\pm 5\%$ in relation to the data observed in the questionnaire.

$$n = \frac{N \times Z_{\alpha}^2 \times p \times (1-p)}{e^2 \times (N-1) + Z_{\alpha}^2 \times p \times (1-p)}$$
(1)

where:

n = Sample size to be calculated;

N = Population size;

 $Z\alpha$ = Deviation of median value accepted to reach the desired confidence level, that for a 95% level, the coefficient value of α = 1.96;

E = Maximum permissible error;

P = Expected proportion

The sample selection in the group of study was made through a simple random probability sample, in such a way that each subject had the same probability of being chosen to answer the questionnaire. In Table 2 the methodological tabulation used in the investigation is shown.

Table 2. Methodological tabulation used in the investigation Geographical Sample Field Sample Confidence **Pilot** Universe **Technique Scope** Work **Error** Level **Test Obtained** Direct Maximum From application Fast food permissible Yes October through a consumers, Hermosillo, error for 95% Application 385 questionnaire to Sonora the global $Z_{\alpha}^{2} = 1.96$ to 40 hamburgers customers and processed December sector data of customers 2014 in the SPSS ±5% v21

4.2. Measurement and Research Instrument

The questionnaire used in this study is based on the Servperf model, and measured the customer's satisfaction applying only the perception, through 20 items grouped in 5 dimensions and using Likert answers with five options. In Table 3 the used Likert scale is shown. The questionnaire was structured by 22 items and adapted to the environment conditions where the Burger King Chain operates.

Table 3. Likert scale used in the measurement instrument

Totally disagree	Disagree	Neither agree nor disagree	Agree	Totally agree
1	2	3	4	5

4.3. Reliability Analysis

To evaluate the reliability of the measurement instrument it was developed an internal consistency analysis through Cronbach's alpha. It is an index that takes values between 0 and 1, used to verify if the instrument is reliable and performs with stable and consistent measurements (Santesmases, 2009). Cronbach's alpha estimates the lower limit of the reliability coefficient and it is expressed through Formula 2.

$$\alpha = \left(\frac{K}{K-1}\right) * \left[1 - \left(\frac{\sum_{i}^{2} S}{S_{sum}^{2}}\right)\right]$$
 (2)

Where k is the number of items in the test; S_i^2 is the items variance (from 1...i) and S_{sum}^2 is the total test variance. This means that the reliability depends on the test length and the covariance among its items (Santesmases, 2009).

It is important to mention that it was decided to apply a pilot test to 40 customers, with the purpose of measuring the questionnaire's internal consistency. In the first version, the test was integrated by 22 items distributed in five dimensions and after being undergone to Cronbach's alpha validity test, the instrument was redesigned to 20 items, as it is presented in Table 4.

Table 4. Items and dimensions of final questionnaire

Dimension	Initial Item	Cronbach's Alpha before eliminating the item	Item eliminated	Cronbach's Alpha after eliminating the item	Total Cronbach's Alpha (20 items)
Tangible	1-5	0.740	5	0.810	
Reliability	6-10	0.903	None	0.903	
Responsiveness	11-14	0.886	None	0.886	0.946
Assurance	15-18	0.846	15	0.869	
Empathy	19-22	0.888	None	0.888	

The data analysis was done by applying the *Statistical Package for the Social Sciences* (SPSS v21) software. The validity was determined using the main components analysis with the Varimax rotation method, which indicated that with three factors or components explained the 66.42% of the total variance.

The sample applicability for the factors extraction was confirmed through the Kaiser-Meyer-Olkin (KMO) construct validity test and the Bartlett's sphericity test, which was significant (P < .000); that indicates association between the variables, thus makes sense to apply the factorial analysis, while the value KMO was 0.944 that places it above the minimum acceptable value (0.5) which reinforce the previous, since it showed that the studied variables are closely associated and correlated between them, this allows to reduce the number of factors, and therefore, shows the convenience of using the questionnaire for the purposes of the investigation (Uriel and Aldas, 2005).

5. Analysis and Results

In Table 5, the socio-demographic data of the customers that formed the population sample is shown.

Table 5. Respondents' socio-demographic information

1 avie	Gende	0 1	ijormaiion I				
Gender	Freque	Percentage					
Male	165	псу	42.9 %				
Female	220		57.1 %				
	ange (years)	Frequency	Percentage				
nge 1	18-25	229	59.5				
	26-35	89	23.1				
	36-45	39	10.1				
	46-55	11	2.9				
56	or more	8	2.0				
	NC	9	2.3				
	Education Level						
Studies	244441011	Frequency	Percentage				
Basic Education	on	20	5.2				
Middle Educat		215	55.8				
Undergraduate		112	29.1				
Graduate		17	4.4				
NA		21	5.5				
	Occupat	ion					
Status	•	Frequency	Percentage				
Student		215	55.8				
Employee		80	20.8				
House holding		26	6.8				
Employer		11	2.9				
Retired		4	1.0				
Dealer		14	3.6				
NA		35	9.1				

As a first approach to the results obtained, it is concluded that the population more involved were women with a 57.1% of participation, besides being concentrated in the age range of 18-25 years, which represents a 35.8% part if respondents. Most of them have a middle education level with a 48.31% percentage; likewise, the 31.9% are students of different levels.

The evaluation of the global satisfaction perceived by the consumers of Burger King Products is shown in Table 6, with the answers to question number one of the investigation; while the answer to question number two, the result of the satisfaction level for each quality dimension evaluated is shown in Table 7.

Table 6. Global satisfaction level of perceived service

Satis	Satisfaction level Frequency		Percentage
Valid	Unsatisfied	66	17.1
	Satisfied	239	62.1
	Pleased	80	20.8
	Total	385	100.0

Table 7. Global satisfaction level by each quality dimension evaluated

Dimension evaluated	Satisfaction level perceived by the customer						
	Unsatisfied	Satisfied	Pleased				
Tangible	67 (17.4%)	253 (65.7%)	65 (16.9%				
Reliability	66 (17.1%)	233 (60.5%)	86 (22.3%)				
Responsiveness	63 (16.4%)	247 (64.2%)	75 (19.5%)				
Assurance	85 (22.1%)	235 (61.0%)	65 (16.9%)				
Empathy	80 (20.8%)	240 (62.3%)	65 (16.9%)				

It can be observed very similar results among the five quality dimensions evaluated by consumers; however, for the dimensions of assurance and empathy there is a higher level than in the others, regarding the unsatisfied level, which represents an opportunity area for an improvement in the offered service.

It is observed an index of service global satisfaction of 69.27%, which means that customers are satisfied with the service received.

5.1. Linear Regression Model

Formula 3 represents, in a general manner, the linear regression model that indicates the lineal dependency of the response variable (Y) respect to various explanatory variables $X_1, X_2, ..., X_5$.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$
(3)

where:

Y = Consumers' global satisfaction

 $B_0 = Constant model$

 $\beta_1 \dots \beta_5 = Model's Betas$

 $X_1 = Tangible$

 $X_2 = Reliability$

 $X_3 = Responsiveness$

 $X_4 = Assurance$

 $X_5 = Empathy$

 $\varepsilon = \text{Error or residual}$

Following, in Table 8, it is presented the overview of the regression model obtained from the method of introducing variables.

Table 8. Overview of the regression model

Model	R	\mathbb{R}^2	\mathbb{R}^2	Standard		Statistics changes				Durbin-
			corrected	error of the estimate	Change in R ²	Change on F	gl1	gl2	Significant change in F	Watson
1	0.912a	.832	.829	5.534	0.832	374.173	5	379	0.000	1.962

a. Independent variable: (Constant), Tot_Dim5, Tot_Dim1, Tot_Dim2, Tot_Dim4, Tot_Dim3

According to the regression model, the coefficient of determination (R^2) explains the 82.9% of the total variance of the dependent variable. The same way, the score of the Durbin-Watson test indicates the existence of independence among the residuals (1.962) since the value is between the range of 1 to 3.

5.2. ANOVA of the Regression Model

The ANOVA of the model illustrates that this significantly improves the prediction of the dependent variable, by giving as a result F = 374.173; P < .001, accepting the alternative hypothesis H_1 , which indicates that the variables of tangible, reliability, responsiveness, assurance and empathy predict the satisfaction global index in Burger King's quality service. The ANOVA is shown in Table 9.

Table 9. ANOVA's linear regression model

Model		el Sum of		Root mean	F	Sig.
		squares		square		
1	Regression	57291.211	5	11458.242	374.173	.000a
	Residual	11606.051	379	30.623		
	Total	68897.262	384			

The coefficients of t values showed that the variables contribute significantly to the model, which indicates that the values obtained, can be generalized to the population, since P (value) < 0.001. According to statistics of collinearity, they indicated that there are no multicollinearity problems among the independent variables; since the values of the variance inflation factor (FIV) are lower than 10, that is, the values results were between 1.436 and 1.834, while all the tolerance values were higher than 10, as it is shown in Table 10.

Table 10. Multiple linear regression model of collinearity statist	Table 10. Mu	ltiple linear	regression	model o	f collinearity	statistics
---	--------------	---------------	------------	---------	----------------	------------

	Model Not standardiz			Typified	t	Sig.	Colline	•	
		coe	fficients	coefficients			statis	statistics	
		В	Standard	Beta			Tolerance	FIV	
			error						
1	(Constant)	22.149	1.244		17.809	0.000			
	Tot_Dim1	5.714	0.577	0.250	9.898	0.000	0.696	1.436	
	Tot_Dim2	6.420	0.595	0.301	10.796	0.000	0.574	1.743	
	Tot_Dim3	5.055	0.639	0.226	7.914	0.000	0.545	1.834	
	Tot_Dim4	4.017	0.589	0.187	6.818	0.000	0.592	1.689	
	Tot_Dim5	4.746	0.621	0.217	7.642	0.000	0.550	1.819	

A condition index between 10 and 20 points indicates that there is no collinearity problem as it is shown in Table 11.

Table 11. Multiple linear regression model of collinearity statistics

	Collinearity ^a Diagnose										
Model	Dim	Coefficient	Condition		Variance proportion						
			index	Constant	Tot_Dim	Tot_Dim	Tot_Dim	Tot_Dim	Tot_Dim		
					1	2	3	4	5		
1	1	5.784	1.000	0.00	0.00	0.00	0.00	0.00	0.00		
	2	0.058	10.010	0.12	0.34	0.00	0.00	0.38	0.10		
	3	0.046	11.158	0.08	0.12	0.53	0.16	0.09	0.08		
	4	0.042	11.786	0.62	0.27	0.00	0.00	0.08	0.28		
	5	0.036	12.612	0.18	0.27	0.00	0.00	0.44	0.54		
	6	0.034	12.994	0.00	0.01	0.47	0.84	0.01	0.01		

a. Dependent variable: global satisfaction

6. Discussion and Conclusion

The failure or success in companies depends, in a great measure, to their ability in identifying the factors that are important to customers, from the perspective of service quality. Being able to recognize the factors that influence the quality perception of customers when they receive a service, it can generate a clear advantage for the company at the moment of competing in markets more and more globalized, where there are a great amount of attractive services in different dimensions and focused to more prepared and demanding clients.

According to the multiple linear regression model proposed for the Burger King chain, fast food restaurant in the hamburger's sector, the explanatory variable with the highest influence in absolute values over the explained variable is the Reliability (X_2) , since its standardized *Beta* coefficient is equal to 0.301 that represents the highest quantity in absolute value, followed by the variables Tangible (X_1) with a *Beta* coefficient value of 0.250; Responsiveness (X_3) with 0.226; Empathy (X_5) with a value of 0.217 and finally; Assurance (X_4) with a coefficient value of 0.187. The data regression equation is displayed in Formula 4:

$$Y = 22.149 + 5.714*(X_1) + 6.420*(X_2) + 5.055*(X_3) + 4.017*(X_4) + 4.746*(X_5)$$
(4)

Based on the above mentions, it is important to continue offering the service in a careful and reliable manner, since the satisfaction of the customers' expectations and needs constitute the basis for the correct implementation of a continuous improvement system in the company. However, the rest of the independent

variables cannot be ignored because each one of them contributes to the model, and therefore, to the global satisfaction service quality.

The scale permits to measure the perceived quality in the fast food restaurant (hamburgers) by the customers of Burger King and becomes an analysis instrument that reveals what is important from customers' perspective, and by confronting them, being able to know what are the company's weakness and strengths, in order to manage and implement the pertinent measures for an improvement.

7. Study Limitations/ Research Future Directions

Some future lines of investigation would be to apply the model to other economic or industry sectors where companies participate and compete for customers' total satisfaction, as well as their loyalty. We have applied this study only on the fast food restaurant —hamburgers sector— and thus we cannot generalize the results that we have acquired on all fast food sectors.

References

- Anker, M. and Batta, V. K., 2000. Manejo básico de restaurantes. México: CECSA.
- Cantú, H., 2006. Desarrollo de una cultura de calidad. (3ra. edición). México, D. F.: McGraw Hill.
- Cronin, J.J. and Taylor, S.A., 1994. SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58(1), pp. 125-131.
- Cronin, J.J. y Taylor, S.A., 1992. Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(3), pp. 55–68.
- Chao, P., 2008. Exploring the nature of the relationships between service quality and customer loyalty: an attribute-level analysis. *The Service Industries Journal*, 28(1), pp. 95-118.
- Jain S.K. and Gupta G., 2004. Measuring service quality: SERVQUAL vs. SERVPERF scales. Vikalpa: The *Journal for Decision Makers*, 29(2), pp. 25-37.
- Kotler, P., Bowen, J. and Makens, J.C., 2005. *Marketing para hotelería y turismo*. 3ª. ed. México D.F.: Prentice-Hall.
- Luna, A.R., 2000. Bases para la Dirección de Entidades Deportivas. Valencia: Promolibro.
- H., Oh., 1999. Service quality, customer satisfaction, and customer value: A holistic perspective. *Hospitality Management*, 18(1), pp. 67-82.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., 1985. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Marketing*, 49, pp. 41-50.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., 1988. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), pp. 12-40.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., 1991. Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), pp. 420-450.
- Santesmases, M., 2009. Marketing: conceptos y estrategias. Editorial Pirámide. 5ta. Edición.
- Setó Pamies, D., 2004. De la calidad de servicio a la fidelidad del cliente. Madrid: ESIC.
- Stevens, P., Knutson, B., and Patton, M., 1995. Dineserv: a Tool for Measuring Service Quality in Restaurants. *Cornell Hotel Restaurant Administration Quarterly*, 36(2), pp. 56-60.
- Talavera, C., 2009. *Definición ABC Restaurante*. *Definición de Restaurante*. Available online at: http://www.definicionabc.com/social/restaurante.php (accessed 9 March 2015).
- Teas, K.R., 1994. Expectations as a comparison standard in measuring service quality: an assessment of a reassessment. *Journal of Marketing*, 58(1), pp. 132.
- Trujillo, A. and Vera, J., 2007. Factors that constitute service quality for mexican consumers in restaurants, in *CLADEA*, 42. Annual Assembly of CLADEA, Miami, Estados Unidos de América, Octubre 2007.
- Uriel, E. and Aldas, J., 2005. Análisis Multivariante Aplicado. Madrid: Editorial Thompson.

