

## Evaluation of customer satisfaction with restaurant services through the ACSI Mode

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### ABSTRACT

This study, which is part of a wider investigation, seeks to analyze in a holistic way the satisfaction customer who make use of restaurant services through ACSI Model. Through structural equations modeling it was evidenced that there is a positive and significant relationship between the quality of service and satisfaction, as well as between the latter and the loyalty of the users. There was also a negative relationship between satisfaction and customer complaint. The results also showed that there is no relationship between perceived quality and perceived value or relationship between variable status and consumer satisfaction. The results corroborate and contradict findings of other studies making it necessary in future research to analyze more deeply this phenomenon as well as to expand the sample to verify these findings. These results highlight the importance of these variables for the integral evaluation of the satisfaction and loyalty of the clients of this type of organization.

**Keywords:** Customer Satisfaction, ACSI Model

### 1. Introduction

Marketing professionals have highlighted the importance of quality service and satisfaction for the survival and success of companies in a marketplace (Marković, & Lončarić, 2014) since these are configured as the basic pillars for the loyalty of a client (Setó Pamies, 2003), a fundamental characteristic to obtain competitive advantage and positive influence on its performance (Ishaq, 2003). Specifically, consumer satisfaction (CS) is a determining factor to ensure customer retention, which in turn has a positive effect on profitability; In addition, it can help businesses acquire new customers and

increase their value in the long term (Yazdanpanah & Feyzabad, 2017). In the tourism industry, this variable is of strategic importance due to its influence on the future behavior of tourists, which in turn influences the loyalty and profitability of the business (Chen, 2012).

Consumer satisfaction has been analyzed in different subsectors of tourism such as agrotourism, rural tourism, air transport, accommodation companies among others, however more research is needed on satisfaction and quality service in other tourist contexts (Sánchez-Rebull, Rudchenko & Martin, 2018). Specifically, the restaurant sector has been little studied from the perspective of tourist satisfaction in emerging economies. According to Andaleeb and Conway (2006) the analysis of CS will allow restaurant owners and managers to design and deliver an adequate offer to satisfy the needs of consumers.

CS in tourism sector is determined by subjective factors (needs and emotions of the client) and objectives (characteristics of the product and service), however, as happen with the definition of this construct, there is no complete set of attributes that determine CS in tourism; In addition, CS analysis in this field also reveals that the multidimensional construction of this variable is usually affected by other latent variables (background) and affects other variables (consequent) (Sanchez, et al., 2018). Based on this, different index evaluation of CS were created to evaluate the general experience of the consumer with a product or service (Türkyılmaz & Özkan, 2007).

The American customer Satisfaction index (ACSI) is the most used because it is based on two well-established theories such as the paradigm of quality, satisfaction and performance, Theory of Confirmation of Expectations (Hoffman & Bateson, 2011) and the exit-voice theory (Hsu, 2008). ACSI model consists of three constructs that act as precedents of the CS: perceived quality, consumer expectations and perceived value; It also includes two constructs that make up the CS consequents variables: Loyalty and complaints management (Yazdanpanah, et. al., 2013). The model allows to obtain an integral evaluation of CS, however for the authors' knowledge it has been little applied for analysis of CS in restaurant sector and it has not been used in contexts of emerging economies. The present research will make use of the ACSI model to obtain a first integral evaluation of CS of restaurant services within a tourist destination located in a

Latin American country cataloged as emerging economies, with the objective of providing a better perspective of the experience of the tourist that uses these services.

## **2. Literature Review**

### **2.1 Customer Satisfaction Evaluation**

Satisfaction is defined as the perceived difference between the expectation and performance of a service or product (Oliver, 1980); It is usually related to the final stage of an acquisition process when the consumer evaluates the perceived benefits of the service purchased subjectively (Oliver, 2014). The comparison between expectation and performance is based on the Theory of Confirmation of Expectations (Hoffman & Bateson, 2011) which establishes that the client is satisfied when the real performance of a service matches the client's expectations; however, if the perceived return is lower or higher than the expectation, a negative or positive disconfirmation is created respectively.

According to Parasuraman, Zeithaml and Berry (1988) consumer satisfaction is defined with base on several perspectives such as quality of service and price, which has led certain authors to affirm that quality of service is a precedent for satisfaction since an improvement in the first one produces a significant increase in the second (Ahrholdt, Gudergan & Ringle, 2017; Pandza Bajcs, 2015). However, quality service cannot be evaluated with a single dimension (Kaura, Prasad & Sharma, 2014) for this reason several authors have defined this concept from several perspectives. By way of illustration, Gronroos (1984) identified three dimensions of quality service: functional, technical and corporate image. Parasuraman et. Al., (1988) reported the existence of five dimensions: reliability, sensitivity, security, empathy and tangibility. Rust and Oliver (1993) proposed three dimensions: functional, technical and environmental. Each dimension of quality reflects a set of service attributes that consumers consider when evaluate the quality of that service dimension and the perception of the influence of the different service dimensions over satisfaction (Ahrholdt et. Al., 2017) which is supported by many researchers (Bansal & Taylor, 2015; Kim et. al., 2017). On the other hand, not only the perceived quality but also the expected future quality is critical for the general satisfaction of the client (Fornell et al., 1996). This predictive role for expectations also suggests that it should have a

positive effect on overall customer satisfaction (Suleiman Awwad, 2012).

Another factor that influences CS is the perceived value defined as the perceived level of product quality in relation to the price paid or the "value for money" aspect of the customer's experience (Parasuraman et al., 1988). The academic literature has argued that customer satisfaction is the result of the perception of the value received by the client and an important antecedent of general satisfaction; In addition, including the value perceived in the CS analysis model increases the comparability of results between companies, industries and sectors, because the price information is added to the model (Suleiman Awwad, 2012).

On the other hand, in today's context organizations besides to provide high quality services, they must provide loyalty in their clients since they are the ones who directly influence the long-term benefit of an organization (Rajeswari, Srinivasulu & Thiagarajan, 2017). The loyalty of a consumer is defined as the willingness of the customers to make repeated purchase of a service accompanied by a psychological link through which they maintain a favorable attitude toward that service or to the organization that provides it (Yeo, Thai & Roh, 2015). In order to increase loyalty, it is necessary to improve consumer satisfaction. The academic literature related to Marketing indicates that around half of satisfied consumers return to buy or reuse services suggesting the need to set up closer relationships with them (Zeithaml, Berry & Parasuraman, 1996) This statement is corroborated by several studies such as the one developed by Paparoidamis, Chumpitaz and Ford, (2015) who showed that satisfaction mediates the between quality of service with loyalty, which allows intuiting the direct connection between satisfaction and loyalty; a finding similar to that obtained Son and Lee (2011). Baker and Crompton (2000) as well as Lee, Huh and Hong (2008) demonstrated that satisfaction positively influences consumer loyalty and diminished customer complaint behavior. As established Son and Lee (2011) the high quality of performance and levels of satisfaction generate greater loyalty and tolerance to price increases, as well as a better reputation of the organization and less customer complaint. Besides, the relationship between the level of customer complaints and the level of customer loyalty depends on the efficacy of a firm's complaint-handling capabilities . If the relationship between the level of

customer complaints and the level of customer loyalty is positive, then the firm is successfully turning complaining customers into loyal customers and vice versa (Fornell et. al., 1996). These findings and statements highlight the need to look for a model that allows an integral assessment of CS.

## **2.2 American Customer Satisfaction Index**

The original interest in customer satisfaction research was on customer's experience with a product episode or service encounter. Nevertheless, more recent studies have focused on cumulative satisfaction because it defines satisfaction as customer's overall experience to date with a product or service provider. This approach to satisfaction provides a more direct and comprehensive measure of a customer's consumption utility, subsequent behaviors and economic performance (Türkyılmaz, & Özkan, 2007).

The ACSI model was developed by Fornell in 1993 and identifies the causal relationships between CS and their antecedents and consequences (Suleiman, 2012). It consists of six constructs: perceived quality, consumer expectations, perceived value, consumer satisfaction, loyalty and customer complaint (Chen, 2012). The first three variables act as background of the CS. Perceived Quality is a measure of recent consumer experience that has a direct or positive impact on the level of overall customer satisfaction; perceived Value is a measure or relation of quality relative to the price paid and although it is not yet a determining factor of a repeated purchase it has a relatively greater importance for the first purchase of a client; Finally, the Customer Expectations is a measure of the customer's anticipation of the quality of the company's products or services and represents the experience prior to the purchase that is made through sources such as advertising or word of mouth (Ali & Kaur, 2018).

The variables loyalty and customer complaint act as consequences of the CS. The first is defined as the commitment to repurchase or recommend a preferred product / service consistently in the future, while customer complaint is defined as customer dissatisfaction and the decision not to use the company's products or services anymore (Yazdanpanah & Feyzabad, 2017). Complaints can be defined as a conflict between the client and the organization (Hsu, 2008). Figure 1 shows a sketch of the variables that make up the ACSI model and the relationship that exists between them.

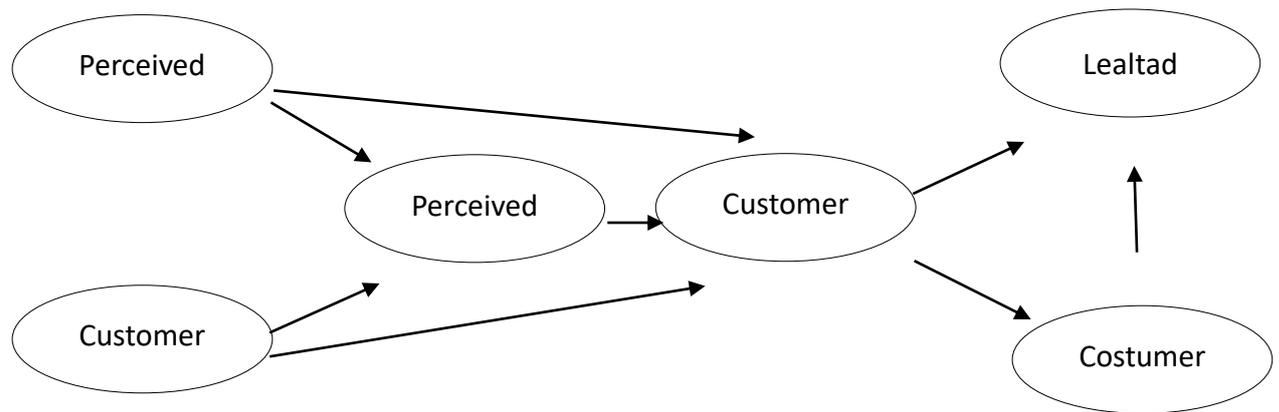


Figure 1. ACSI Model

Based on the ACSI model and the revised literature, the following research hypotheses are proposed:

- H1: Perceived quality has a positive effect on consumer satisfaction
- H2: Perceived quality has a positive effect on Perceived Value
- H3: Customer Expectation has a positive effect on consumer satisfaction
- H4: Customer Expectation has a positive effect on Perceived Value
- H5: Customer Satisfaction has a positive effect on loyalty
- H6: Customer Satisfaction has a negative effect on Customer Complaint
- H7: Customer Complaint has a positive effect on loyalty

### 3. Methodology

In this researching, a convenience sampling was used, obtaining a sample of 206 customers of different restaurants in an important touristic destination. According to Shah and Goldstein (2006) this sample size is considered enough to apply structural equation modeling. To measure each of the variables we used the scale proposed by Chen (2012) where each variable were measured with three items evaluated with a Likert scale from one to ten. Only perceived value, loyalty and Customer Complaint were measured with two items. The surveys were applied to customers who already used the services of the restaurant. The data collection was done in a period of two months with customers who were willing to cooperate in the study. The reliability, goodness of fit and validity of each of the scales were verified, while hypothesis testing was carried out using structural equations modeling.

#### 4. Discussion And Results

The fit of the model was evaluated with the indicators that according to Kline (2015) should be reported: CFI, RMSEA, SRMR and CMIN / DF. The structural model that includes the measurement models and the correlations between latent variables had a good fit since all of the indexes calculated were within the required thresholds, except el valor de RMSEA nevertheless, it is close to the limit value which could allow us to conclude the model has an acceptable fit. Table one shows the calculated values. On the other hand, the model met the criterion of convergent validity because of each of the items or questions showed a positive and significant correlation (p-value <0.05) with their respective latent variable. In addition, the Cronbach's Alpha obtained in the scales of each latent variable was greater than 0.7, which allows us to conclude that they are reliable scales according to (Ajzen, 2002).

Table 1. Structural Model Adjustment Indices

Index	Calculated Value	Required Value
SRMR	0.0433	≤ 0.05
CFI	0.977	≥ 0.95
RMSEA	0.067	≤ 0.06
CMIN/DF	2.227	< 5

In order to verify the hypotheses proposed, the correlation coefficients between the latent variables were analyzed. The results are shown in Table 2. These findings indicate that there is a positive and significant correlation (0.756; p-value <0.05) between perceived quality and customer satisfaction which allows us to accept the hypothesis H1. Similarly, there is a positive and significant correlation (0.957; p-value <0.05) between perceived quality and perceived value, allowing acceptance of hypothesis H2. However, the correlations between customer expectation and customer satisfaction (0.026; p-value > 0.05) and between customer expectation and perceived value (0.008; p-value > 0.05) were not significant leading to reject hypothesis H3 and H4. Regarding the consequent variables of the model, Customer satisfaction is

positively and significantly related (0.834, p-value <0.05) with loyalty and negatively with Customer complaint (0.720; p-value <0.05) allowing accepting hypotheses H5 and H6; However, the relationship between Customer Complaint and Loyalty was negative and significant (-0.169, p-value <0.05) leading to reject hypothesis H7.

Table 2. Estimates of regression between latent variables.

		Estimate	Standardized estimate	S.E.	P-value
Perceived Value	<-- Perceived Quality	0.00959	0.957	0.038	***
Perceived Value	<-- Customer Expectations	0.013	0.008	0.043	0.767
Satisfaction	<-- Perceived Value	0.194	0.193	0.151	0.201
Satisfaction	<-- Perceived Quality	0.759	0.756	0.156	***
Satisfaction	<-- Customer Expectations	0.039	0.026	0.043	0.364
Complaint	<-- Satisfaction	-0.971	-0.720	0.083	***
Loyalty	<-- Satisfaction	1.007	0.834	0.059	***
Loyalty	<-- Complaint	-0.151	-0.169	0.035	***

The reported findings confirm the results obtained in other investigations (Bansal & Taylor, 2015; Kushwana, Mohan & Mandal, 2013; Son & Lee, 2011) however contradict other studies such as Suleiman Awwad (2012) and Ali and Kaur (2018). It was evident that there is no direct relationship between Customer expectations with Satisfaction and perceived Value. Similarly, perceived value has no relation with satisfaction. However, there is a positive and significant relationship between

perceived quality with satisfaction and satisfaction with loyalty. Customer satisfaction also has a negative relationship with customer satisfaction.

## 5. Conclusions

The purpose of this research was to analyze customer satisfaction in restaurant services offered in an important touristic destination through the ACSI model. This sector was chosen due to the necessity to have a tool that allows an integral evaluation of the users' satisfaction of these services and due to the importance of this sector in the tourism context. The study was applied in a sample of 206 customers and the results obtained allowed to conclude that the perceived quality of service influences the satisfaction of the users and at the same time, this last variable influences in a positive way the loyalty towards the restaurant service and the negative way to customer complaint. This allows us to conclude that, to a greater satisfaction, customers will be willing to buy or reuse the services, recommend them as well as complain less about the service received. No evidence was found of a direct relationship between customer expectations with satisfaction and loyalty, which may be due to the change in customer expectations once the service is used. In future studies it is recommended to analyze this effect more deeply as well as to expand the sample to verify the reliability and validity of the results obtained.

## 6. References

- Ali, S. S. and Kaur, R. (2018). 'An analysis of satisfaction level of 3PL service users with the help of ACSI'. *Benchmarking: An International Journal*, Vol. 25, No. 1, pp. 24-46.
- Ajzen, I. (2002). 'Constructing a TPB questionnaire: Conceptual and methodological considerations'.
- Ahrholdt, D. C., Gudergan, S. P. and Ringle, C. M. (2017). 'Enhancing service loyalty: The roles of delight, satisfaction, and service quality'. *Journal of Travel Research*, Vol. 56, No. 4, pp. 436-450.
- Baker, D. A. and Crompton, J. L. (2000). 'Quality, satisfaction and behavioral intentions'. *Annals of tourism research*, Vol. 27, No. 3, pp. 785-804.
- Bansal, H. S. and Taylor, S. (2015). 'Investigating the relationship between service

- quality, satisfaction and switching intentions'. In Proceedings of the 1997 Academy of Marketing Science (AMS) Annual Conference, pp. 304-313. Springer, Cham.
- Chen, L. (2012). 'Developing Hong Kong tourist satisfaction index using Bayesian structural equation modeling approach' (Doctoral dissertation, The Hong Kong Polytechnic University).
- Gronroos, C. (1984). 'Strategic Management and Marketing in the Service Sector'. Marketing Science Institute, Cambridge, Massachusetts Report, pp. 83-104.
- Hoffman, K. D., & Bateson, J. E. (2011). 'Marketing de Servicios. Conceptos, estrategias y casos'. México: CENGAGE Learning.
- Hsu, S. H. (2008). 'Developing an index for online customer satisfaction: Adaptation of American Customer Satisfaction Index'. Expert Systems with Applications, Vol. 34, No. 4, pp. 3033–3042.
- Ishaq, I. M. (2012). 'Perceived value, service quality, corporate image and customer loyalty: Empirical assessment from Pakistan'. Serbian Journal of Management, Vol. 7, No. 1, pp. 25-36.
- Kaura, V., Prasad, C. S. D. and Sharma, S. (2014). 'Impact of service quality, service convenience and perceived price fairness on customer satisfaction in Indian retail banking sector'. Management and Labour Studies, Vol. 39, No. 2, pp. 127-139.
- Kline, R. B. (2015). 'Principles and practice of structural equation modeling'. Guilford publications.
- Kushwana, R.K., Mohan, M. and Mandal, D. (2013). 'An empirical study of SERVQUAL, customer satisfaction and loyalty in Indian Banking sector'. International Journal of Research in Commerce, IT & Management, Vol. 3, No 4, pp. 13-15.
- Lee, S. Y., Huh, J. and Hong, S. K. (2008). 'Determining behavioral intention to visit a festival among first-time and repeat visitors'. International Journal of Tourism Sciences, Vol. 8, No. 1, pp. 39-55.
- Marković, S. and Lončarić, D. (2014). 'Service quality and customer satisfaction in the health care industry-towards health tourism market'. Tourism and hospitality management, Vol. 20, No. 2, pp. 155-170.
- Oliver, R. L. (1980). 'A cognitive model of the antecedents and consequences of satisfaction decisions'. Journal of marketing research, Vol. 17, No. 4, pp. 460-469.

- Oliver, R. L. (2014). 'Satisfaction: A Behavioral Perspective on the Consumer: A Behavioral Perspective on the Consumer'. Routledge.
- Pandža Bajsi, I. (2015). 'Tourist perceived value, relationship to satisfaction, and behavioral intentions: The example of the Croatian tourist destination Dubrovnik'. *Journal of Travel Research*, Vol. 54, No. 1, pp. 122-134.
- Paparoidamis, N. G., Chumpitaz, R. and Ford, J. (2015). 'Service quality, customer satisfaction, value and loyalty an empirical investigation in a service failure context'. In *Marketing Dynamism & Sustainability: Things Change, Things Stay the Same*, pp. 173-173. Springer, Cham
- Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1988). 'Servqual: A multiple-item scale for measuring consumer perc'. *Journal of retailing*, Vol. 64, No. 1, pp. 12.
- Rajeswari, S., Srinivasulu, Y. and Thiyagarajan, S. (2017). 'Relationship among Service Quality, Customer Satisfaction and Customer Loyalty: With Special Reference to Wireline Telecom Sector (DSL Service) '. *Global Business Review*, Vol. 18, No. 4, pp. 1041-1058.
- Rust, R. T. and Oliver, R. L. (Eds.). (1993). 'Service quality: New directions in theory and practice'. Sage Publications
- Saad Andaleeb, S. and Conway, C. (2006). 'Customer satisfaction in the restaurant industry: an examination of the transaction-specific model'. *Journal of services marketing*, Vol. 20, No. 1, pp. 3-11.
- Sánchez-Rebull, M. V., Rudchenko, V. and Martín, J. C. (2018). 'The antecedents and consequences of customer satisfaction in tourism: a systematic literature review'. *Tourism and hospitality management*, Vol. 24, No. 1, pp. 151-183.
- Setó Pamies, D. (2003). 'La influencia de la calidad de servicio, la imagen, la satisfacción y la confianza en la fidelidad del cliente'. *Revista Española de Investigación de Marketing. ESIC*, Vol. 7, No. 1, pp. 27-55.
- Shah, R. and Goldstein, S. M. (2006). 'Use of structural equation modeling in operations management research: Looking back and forward'. *Journal of Operations Management*, Vol. 24, pp. 148–169.
- Son, S. M. and Lee, K. M. (2011). 'Assessing the influences of festival quality and satisfaction on visitor behavioral intentions'. *Event Management*, Vol. 15, No. 3, pp. 293-303.
- Suleiman Awwad, M. (2012). 'An application of the American Customer Satisfaction

- Index (ACSI) in the Jordanian mobile phone sector'. *The TQM Journal*, Vol. 24, No. 6, pp. 529-541.
- Türkyılmaz, A. and Özkan, C. (2007). 'Development of a customer satisfaction index model: An application to the Turkish mobile phone sector'. *Industrial Management & Data Systems*, Vol. 107, No. 5, pp. 672-687.
- Yazdanpanah, M. and Feyzabad, F. R. (2017). 'Investigating Iranian Farmers' Satisfaction with Agricultural Extension Programs Using the American Customer Satisfaction Index'. *Journal of Agricultural & Food Information*, Vol. 18, No. 2, pp. 123-135
- Yazdanpanah, M., Zamani, G. H., Hochrainer-Stigler, S., Monfared, N. and Yaghoubi, J. (2013). 'Measuring satisfaction of crop insurance a modified American customer satisfaction model approach applied to Iranian Farmers'. *International Journal of Disaster Risk Reduction*, Vol. 5, pp. 19-27.
- Yeo, G. T., Thai, V. V. and Roh, S. Y. (2015). 'An analysis of port service quality and customer satisfaction: The case of Korean container ports'. *The Asian Journal of Shipping and Logistics*, Vol. 31, No. 4, pp. 437-447.
- Zeithaml, V. A., Berry, L. L. and Parasuraman, A. (1996). 'The behavioral consequences of service quality'. *The Journal of Marketing*, pp. 31-46.