The effect of **service orientation** and **service quality** on customer loyalty in **Tourism**

O efeito da **orientação para o serviço** e da **qualidade do serviço** na lealdade do consumidor no **Turismo**

MANUEL A. RAMOS MAÇÃES * [macaes@port.ulusiada.pt]

Abstract | The objective of this research study is to analyze the relationships between the service orientation, service quality, and customer loyalty variables in the catering sector. The analysis is based on data collected from a sample of 220 customers of restaurants, using the structural equation modeling (SEM). The results from the study show that service orientation by employee has a significant direct positive effect on service quality and significant indirect effect on customer loyalty through service quality. The results also show that, unlike service quality, service orientation does not have a significant direct influence on customer loyalty. This study addresses an important gap in marketing research, because no empirical studies have been conducted to investigate the synergistic effect of service orientation and service quality on customer loyalty in the catering sector. Implications, limitations and recommendations for future research are presented in the final part of the paper.

Keywords | Service, quality, DINESERV, expectations, perceptions, loyalty.

Resumo | O objetivo deste estudo é analisar as relações entre as variáveis orientação para o serviço, qualidade do serviço e lealdade do cliente, no setor da restauração. A análise baseou-se em dados recolhidos de uma amostra de 220 restaurantes, com recurso à técnica dos modelos de equações estruturais (SEM). Os resultados do estudo mostram que a orientação para serviço dos empregados tem um efeito significativo direto positivo na qualidade do serviço e um efeito indireto significativo na fidelização do cliente, através da qualidade do serviço. Os resultados mostram ainda que, ao contrário da qualidade do serviço, a orientação para o serviço não tem um efeito direto significativo na fidelização do cliente. Este estudo preenche uma importante lacuna na pesquisa em marketing, porque os estudos empíricos não têm investigado o efeito sinérgico da orientação para o serviço e da qualidade do serviço na fidelização do cliente no setor da restauração. Implicações, limitações e recomendações para investigações futuras, são apresentadas na parte final do estudo.

Palavras-chave | Qualidade do serviço, DINERSEV, expectativas, perceções, lealdade.

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* **Doutor em Ciências Empresariais** pela Universidade do Minho, Área de Marketing e Gestão Estratégica. **Professor Auxiliar** na Universidade Lusíada Norte – Porto, Portugal.

1. Introduction

In an increasingly saturated and competitive market resulting from growing competition between countries to attract ever more tourists, the tourism sector in general and the catering sector in particular are going through a period of great instability and uncertainty. In the catering sector, escalating competition has led restaurant operators to seek new differentiation strategies in order to improve their profitability. One of these strategies is seek new ways of improving service quality so as to increase customer loyalty (Stevens, Knutson & Patton, 1995). Existing research supports the basic principle that high quality in products and services is favored in the market and suggests that high service quality increases customer satisfaction, improves results, produces cost savings and increases market share (Anderson, Fornell & Lehmann, 1994).

Although marketing theory has emphasized in recent years that customers should be at the centre of the marketing strategy and that profits are generated by satisfying customers' needs, there is still a clear lack of focus on service quality and customer loyalty. One of the reasons for this lack of attention to customer loyalty may arise from the difficulty in defining, measuring, and maintaining service quality, customer satisfaction, and customer loyalty.

The authors agree that service quality is an abstract concept that is difficult to define and measure (Parasuraman, Zeithaml, and Berry, 1985). Parasuraman et al. (1985) suggest that service quality is evaluated by the gap between the service expected and the service perceived by the customer. These authors developed a measurement scale called SERVQUAL, used to measure the concept of service quality (Parasuraman, Zeithaml, and Berry, 1988). This scale was subsequently improved, redefined and re-evaluated by the same authors, who concluded that it could be used as a diagnostic methodology for evaluating service quality and for identifying its strengths (Parasuraman, Berry & Zeithaml, 1991).

Despite having been shown to be appropriate for measuring service quality in the majority of sectors, the SERVQUAL model has been the subject of various criticisms. For this reason, Stevens et al. (1995) developed a specific model to measure service quality in the catering sector known as DINESERV.

The purpose of this study is to validate the two instruments Groves' (1992) service orientation measure and DINESERV service quality measurement scale and to assess the service orientation and perceived service quality in the Portuguese catering sector. The DINESERV model is adopted in this study since the empirical research is concerned precisely with the catering sector and because it has a high degree of reliability. The main goal of this study is to analyze empirically the synergistic relationships between service orientation of employees, service quality and customer loyalty, to investigate the key drivers of customer loyalty, and examine what leaders in service catering organizations can do to enhance customer loyalty.

The paper is organized along the lines of a discussion of the literature and hypotheses, methodology and analysis of results. The final section is dedicated to conclusions, limitations, and future research directions.

2. Service Quality Models

In this section the main models in service quality measurement will be analyzed, which are the most useful in this area.

2.1. SERVQUAL Model

Based on disconfirmation paradigm, Parasuraman et al. (1985) developed a new model of service quality measurement. They try to cover the weakness of other models by offering a new way for measuring service quality. In their SERVQUAL model, they suggest to use the gap or difference between expected

level of service and delivered level of service for measuring service quality perception with five dimensions: Reliability, Responsiveness, Assurance, Empathy, and Tangibility (Figure 1). SERVQUAL is an analytical tool, which can help managers to identifying the gaps between variables affecting the quality of the offering services (Seth, Deshmukh, & Vrat, 2005). This model is the most used by marketing researchers, although it is an exploratory study and does not offer a clear measurement method for measuring gaps at different levels. This model has been refined and some believe that only performance needed to be measured as SERVPERF model in order to find perception of service quality (Cronin & Taylor, 1992). Finding in years of using this model shows SERVQUAL factors are inconsistent and it is not comprehensive for different applications (Dabholkar, Thorpe & Rentz, 1996; Shahin & Samea, 2010).
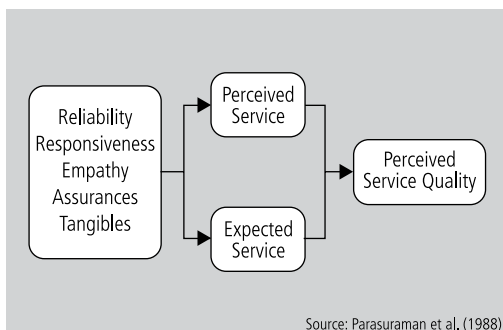

Source: Parasuraman et al. (1988).

Figure 1 | The SERVQUAL Model.

2.2. Multilevel Model

Because inconsistent reported in SERVQUAL factors, Dabholkar et al. (1996) proposed the multilevel model for service quality. They suggest changing the structure of service quality models to a three-stage model: overall perceptions of service quality, primary dimensions, and sub dimensions (Figure 2). This model was designed for evaluating service quality in retail store. Although multilevel propose a new structure, it needs to generalize for different areas and consider the effect of some other factors such as environment, price, etc. In addition, there is lack of identifying attributes or factors that define the sub dimensions.

2.3. Hierarchical Model

Brady and Cronin (2001) suggested a new model by combining four models. They improved SERVQUAL (Parasuraman, et al., 1988) by specifying what needed to be reliable, responsive, empathic, assured and tangible. Brady and Cronin (2001) adopted service quality perception based on evaluation by customer in three dimensions: 1.Interaction Quality, 2. Physical Environment Quality, 3.Outcome Quality (Gronroos, 1984; Rust & Oliver, 1994). In addition, they accept multilevel service quality perceptions
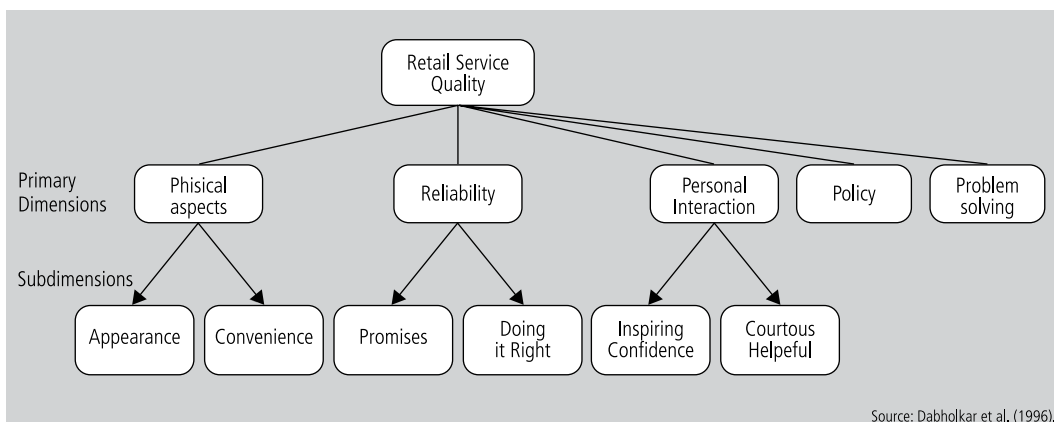

Source: Dabholkar et al. (1996).

Figure 2 | The Multilevel Model.

and multidimensional (Dabholkar et al., 1996). Service quality has three primary level dimensions in this conceptualization such as interaction, environment and outcome with three sub dimensions for each one: Interaction (Attitude – Behavior – Expertise), Environment (Ambient Conditions – Design – Social Factors), and Outcome (Waiting Time – Tangibles – Valence. A new model conceptualized by this hierarchical model and SERVQUAL factors specified into subdimensions. Brady and Cronin (2001) have improved service quality framework and solved the impasse in this theory. It defines service quality perception and a clear form of service quality measurement. In SERVQUAL measurement, service outcomes were not clearly considered, but Brady and Cronin's model seems to fill this void (Pollack, 2009).

In addition, it shows the customer experience at different levels and various dimensions of service (Figure 3). Some researchers work on the hierarchical model and found the reliability for this framework in various services. Like all the measurements, hierarchical model has difference in factors and importance of sub dimensions in regards to services such as health care (Chahal & Kumari, 2010; Dagger, Sweeney, & Johnson, 2007), Sport (Ko, 2000), mobile health (Akter, D'Ambra, & Ray, 2010), hairdresser and phone service subscribers (Pollack, 2009). This model will able firms to recognize problems in pri-
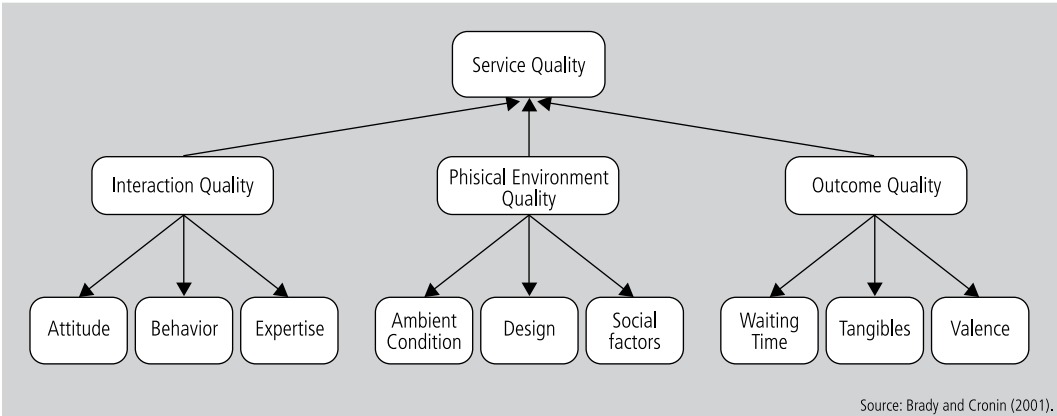
mary stage of their delivered services – Interaction Quality, Physical Environment Quality, and Outcome Quality – (Pollack, 2009). It can help managers find customer needs and service weaknesses simultaneously in order to enhance service quality perception and service experiences of customer via high quality of service. This model shows better understanding about customer perception of service quality.

3. Proposed Conceptual Model and Research Hypotheses

The review of the literature is organized as follows: (1) analysis of the concept of service orientation and identification of measurement scales, (2) adaptation and development of the SERVQUAL measurement scale to the catering sector, and (3) analysis of the concept of customer loyalty and definition of related measurement scales.

3.1. Service Orientation

There is no clear consensus about the definition of service orientation, with several authors proposing their own formulations and measurement scales.

Figure 3 | The Hierarchical Model.

Hogan et al. (1984) defined service orientation as a "disposition to be helpful, thoughtful, considerate, and cooperative" (p. 167). The authors suggested that the concept of service orientation could be assessed using personality measures and developed a service orientation scale called the "Service Orientation Index" which distinguishes the more service-oriented employees (likable, willingness to follow rules) from those who are not (rude, tactless). Dienhart et al. (1991) developed a 50-item scale comprising three dimensions – customer focus, organizational support, and service under pressure.

This present work is based on the scale developed by Groves (1992), which modified and simplified the scale of Dienhart et al. (1991). Groves (1992), employing principal components factor analysis, reduced the scale of Dienhart et al. (1991) to 34 items, which converge on the same three dimensions or factors. The reliability analysis, using Cronbach's alpha coefficient, is satisfactory, with reliability coefficients of 0.77 for customer focus, 0.77 for organizational support and 0.80 for service under pressure.

For all the items, 7-point Likert scales were used, in which 1 corresponds to "strongly disagree" and 7 corresponds to "strongly agree".

3.2. Service Quality

Service quality is a concept that has generated considerable interest in the literature in view of the difficulties in finding a definition and a measurement scale that are supported by the majority of researchers (Wisniewski, 2001). There are various definitions of what is meant by service quality, but the one that is most widely used defines service quality as the "extent to which a service meets customers' needs and expectations" (Lewis & Mitchell, 1990; Dotchin & Oakland, 1994; Wisniewski & Donnelly, 1996; Asubonteng et al., 1996). Service quality can be defined as the difference between the expectations about the service and the service perceived by the customer. Where the expectations are greater than the results, the perceived quality is not satisfactory and the customer is dissatisfied (Parasuraman et al. 1985; Lewis & Mitchell, 1990).

The question that arises is this: why measure service quality? Measurement of the quality of the service provided facilitates comparison between the states before and after changes and makes it possible to establish quality standards. Any measurement of the quality of the service provided should take into account the customer's expectations of the service and his perceptions of the service provided. Despite extensive discussion of the subject, this is an issue about which "it is apparent that there is little consensus of opinion and much disagreement over a number of conceptual and operational issues" (Robinson, 1999).

The SERVQUAL model developed by Parasuraman et al. (1985, 1988, 1991, and 1993) is the most widely used method of measuring service quality. It consists of comparing consumers' expectations prior to the provision of the service with their perceptions of the service provided. It consists of a scale composed of 22 items, which initially converged on ten dimensions, but which was later improved, refined and simplified, converging in the most recent studies on five generic dimensions or quality factors (Van Iwaarden et al., 2003):

a. Tangibility: meaning the physical elements such as furniture, employees' appearance, linen and uniforms, equipment and layout.
b. Reliability: meaning the capacity to deliver what was promised on the scheduled date.
c. Responsiveness: meaning the ability to understand customers' problems and difficulties and to respond in a positive way.
d. Assurance: meaning the perception that the customer has of the employee's ability to respond to his needs.
e. Empathy: meaning the attitude that the employee possesses and displays in the individual attention and care provided to the customer.

The SERVQUAL model, despite its longevity and the criticisms leveled against it, has proved to be appropriate for measuring the majority of services. Subsequent empirical studies have shown that the 22-item scale is exhaustive and appropriate for application to a wide range of services (Parasuramann et al., 1991, 1993).

In the particular case of the catering industry, the SERVQUAL scale has undergone various alterations to adapt it better to that sector and to improve its reliability. Stevens, Knutson and Patton (1995) developed an adaptation of the SERVQUAL scale, known as DINESERV, which consists of a scale composed of 29 items designed to measure customers' expectations and perceptions. It is based on the scale of Parasuraman et al. (1988) and comprises the same five dimensions – tangibility, reliability, responsiveness, assurance, and empathy.

In the research that they carried out, the scale of Stevens et al. (1995) showed high internal consistency ($\alpha = .95$). Cronbach's alpha coefficients found for each of the dimensions were .89, .92, .90, .89 and .92, respectively.

In this research, the DINESERV scale was used to measure service quality because of its high degree of reliability. All the items were measured using 7-point Likert scales, where 1 corresponds to "strongly disagree" and 7 corresponds to "strongly agree".

3.3. Customer Loyalty

Customer loyalty can be defined as "the feeling of attachment to or affection for a company's people, products, or services" (Jones & Sasser, 1995:94). Customer loyalty, with its final effect on repurchasing by customers, is probably one of the most important constructs in service s marketing. Previous research suggests that customer loyalty is a key driver of financial performance in service organizations (Ganesh et al., 2000; Jones & Sasser, 1995).

Customer loyalty also leads to lower costs of retention compared to the costs of attracting new customers (Zeithaml, 2000). Relationship with loyalty customers are typically less expensive to service, and loyal customers contribute to the organization by buying more and paying premium prices, and engaging in behaviors that are beneficial to the organization such as acting as advocates of the organization (Ganesh et al., 2000).

Customer loyalty has been measured more recently by the customer's share of purchases. Other alternative measures of customer loyalty are: (1) future buying intentions and (2) secondary behaviors such as good references to customers, transmitting favorable opinions and (3) word-of-mouth (Ganesh et al., 2000; Jones & Sasser, 1995). In the service industry, word-of-mouth advertising is recognized as one of the most powerful marketing tools (Augustyn & Ho, 1998).

In order to evaluate customer loyalty in this study, questions were asked such as (1) "I would come back to this restaurant" or (2) "I would recommend this restaurant to my friends". Both questions show a high degree of reliability ($\alpha = .81$). The items were measured on a 7 - point Likert scale, where 1 corresponds to "strongly disagree" and 7 corresponds to "strongly agree".

Figure 4 shows an outline of the proposed conceptual model analyzing the causal relationships between service orientation, service quality and customer loyalty.

Using the proposed conceptual model as a basis, we formulated the following research hypotheses, which describe the causal relationships of the model:

H1: A high degree of service orientation among employees has a significant positive effect on service quality perceived by the customer.

H2: A high degree of service orientation among employees has a significant positive effect on customer loyalty.

H3: A favorable perception of service quality has a significant positive effect on customer loyalty.
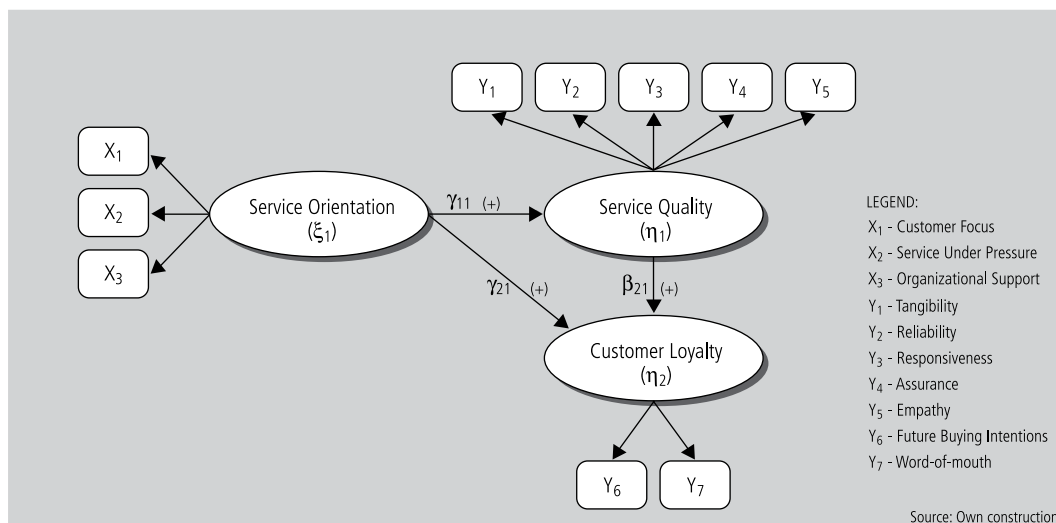
Figure 4 | Proposed Conceptual Model.

4. Methodology

Given that the principal objectives of this research are quantitative, as with other similar studies, the most appropriate data collection methodology is questionnaire-based survey (Clarke & Dawson, 1999). In drawing up the questionnaire, we researched the existing literature, especially articles published in scientific reviews and journals in the discipline, in order to identify the conceptual domains concerned in this research and to attempt to find measures for the variables included in the model. As a result of that research, we sought to identify a set of measures used previously in studies on service orientation, service quality and customer loyalty

The questionnaire was designed to test the causal relationships described in the conceptual model (Figure 4). All the measurement scales used in the questionnaire had already been extensively developed and tested in previous studies in the areas of marketing and strategic management and, in general, had met the recommended reliability and validity standards (Churchill, 1979). The different concepts are of a multi-dimensional character,

and bilateral 7-point Likert scales were selected to measure the different attitude levels.

The data used to test the hypotheses were collected from restaurant customers in Portugal. Questionnaires were distributed to customers at different times during the lunch and dinner meal period. A total of 315 questionnaires were distributed, and 220 of them were completed and valid. For the objectives of this research, the sample size was considered adequate and compatible with the use of the structural equation models methodology (Hair et al., 2009).

Before distribution to respondents, the questionnaire was pre-tested, which consisted of evaluation by five specialists in marketing who were fully familiar with the objectives of the research. Each specialist was asked to evaluate the clarity of each question having regard to the specific organizational context that was to be studied. The questionnaire was purified as opinions and suggestions were received from these specialists. Their recommendations were taken into account in the final design of the questionnaire, and the items regarded as the most problematical were revised or removed.

5. Analysis and Results

5.1. Measurement Assessment

Construct validity determines the extent to which a scale measures a variable. To validate the instruments in terms of convergent validity and discriminant validity a principal components factor analysis with varimax rotation was performed. In this study, Bartlett's Test of Sphericity ($p = .00$) indicated the statistical probability that the correlation matrix has significant correlations among at least some of the variables, and the Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy (.92) showed good sampling adequacy.

Reliability was evaluated by assessing the internal consistency of the items representing each construct using Cronbach's alpha reliability statistic. The reliability of each construct was as follows: service orientation .91; service quality .89; customer loyalty .89. All values were above .70, exceeding the common threshold values recommended by Nunnally (1978).

5.2. Evaluation of the Theoretical Model

The results of the evaluation of the structural model are presented in Table 1. The standardized coefficients of the structural model are significant at .001 level (t > 2.58, $p < .01$), with the exception of the coefficient γ_{21}, which is not significant (t < 1.96, $p < .05$), indicating that service orientation does not have a significant direct effect on customer loyalty, but does have an indirect effect via service quality. The chi-squared statistic is 825.896, with 45 degrees of freedom ($p < 0.001$) and the fit indices GFI = .92, AGFI = .86, CFI = .92, SRMR = .05 and RMSEA = .05 show a good fit of the structural model to the observed data, except for AGFI, which suggests that there is some room for improvement in terms of model parsimony.

The causal relationships of the theoretical model between the service orientation, service quality and customer loyalty latent variables are significant, indicating that the direct relationships between service orientation and service quality and between

Table 1 | Results of the Structural Model

Structural Model				
Exogenous Variables	**Endogenous Variables**	**Path Coefficients**	**Standardized Coefficients**	**t Value**
SO (ξ)	SQ (η_1)	γ_{11} (SO-SQ)	.73***	8.64
	CL (η_2)	γ_{21} (SO-CL)	.002	.008
		β_{21} (SQ-CL)	.88***	3.07
Measurement Models				
Exogenous Variables	**Endogenous Variables**	**Path Coefficients**	**Standardized Coefficients**	**t Value**
SO				
CUSF (X_1)		λX_{11} (CUSF-SO)	1.00***	–
SERP (X_2)		λX_{21} (SERP-SO)	1.08***	8.25
ORGS (X_3)		λX_{31} (ORGS-SO)	.92***	9.02
	SQ			
	TANG (Y_1)	λY_{11} (TANG-SQ)	1.00***	–
	RLAB (Y_2)	λY_{21} (RLAB-SQ)	1.02***	9.35
	RESP (Y_3)	λY_{31} (RESP-SQ)	1.40***	12.17
	ASSU (Y_4)	λY_{41} (ASSU-SQ)	.86***	6.97
	EMPT (Y_5)	λY_{51} (EMPT-SQ)	1.06***	9.13
	CL			
	FUTB (Y_6)	λY_{62} (FUTB-CL)	1.06***	6.74
	WMOU (Y_7)	λY_{72} (WMOU-CL)	1.00***	–

$\chi^2 = 825.896$ f.d. = 45; GFI = 0.92; AGFI = 0.86; CFI = 0.92; SRMR = 0.05; RMSEA = 0.05. * P < 0.05; ** P < 0.01; *** P < 0.001.
Legend: SO - Service Orientation; SQ - Service Quality; CL - Customer Loyalty; CUSF - Customer Focus; SERP - Service Under Pressure; ORGS - Organizational Support; TANG - Tangibility; RLAB - Reliability; RESP - Responsiveness; ASSU - Assurance; EMPT - Empathy; FUTB - Future Buying Intentions; WMOU - Word-of-mouth.
Source: Own elaboration.

service quality and customer loyalty are empirically supported.

In turn, the relationship between service orientation and customer loyalty is not empirically supported, indicating that service orientation does not have a significant direct influence on customer loyalty, but exerts an indirect influence via service quality perceived by the customer.

5.3. Hypotheses Testing

5.3.1. Relationship between Service Orientation and Service Quality

This study assumes that service orientation has a significant direct positive effect on service quality perceived by the customer (H_1).

Examination of Table 1 shows that the service orientation variable has a direct and significant positive effect on the perceived quality of the service ($\gamma_{11} = .73$, $p < 0.001$), meaning that a high degree of service orientation in the employee's contacts significantly and positively affects the perception that the customer has of the quality of the service ($t = 8.64$, $p < .001$). This conclusion shows that a service-oriented attitude has an obvious positive effect on the perception of the quality of the service, which supports hypothesis H_1 of this research.

5.3.2. Relationship between Service Orientation and Customer Loyalty

This study assumes that service orientation has a positive and significant direct effect on customer loyalty (H_2).

Examination of Table 1 shows that a significant relationship does not exist between the service orientation and customer loyalty variables ($\gamma_{21} = .002$, $p > 0.001$), meaning that a high degree of service orientation in the employee's contacts does not significantly affect the degree of customer loyalty ($t = .008$, $p > .001$). This conclusion shows that a service-oriented attitude, in itself, does not have an obvious significant effect on customer loyalty, with

the result that hypothesis H_2 of this research is not supported.

5.3.3. Relationship between Service Quality and Customer Loyalty

This third hypothesis posits that the relationship between the quality of the service perceived by the customer, directly and positively influences the degree of customer loyalty (H_3).

Examination of Table 1 confirms that the service quality variable has a positive and significant direct effect on customer loyalty ($\beta_{21} = .88$, $p < .001$), meaning that the better the quality of the service perceived by the customer, the greater the degree of customer loyalty ($t = 3.07$, $p < .001$). This conclusion shows that perceived quality has an obvious positive effect on customer loyalty, which supports hypothesis H_3 of this research.

6. Conclusion

The objective of this research was to analyze empirically the direct and indirect effect of service orientation on customer loyalty in the restaurant and food industry, using the structural equation models methodology based on EQS 6.1 (Bentler, 2006). It was also an objective of this work to validate in a different context the DINESERV measurement instruments (Stevens et al., 1995), and Groves's scale (1992), used to measure service quality and service orientation respectively, and to offer managers some clues about how they might increase the degree of loyalty of their customers.

The results of the service orientation-customer loyalty model show that employees with a high degree of service orientation make a difference to customers' perception of the quality of the service and to customer loyalty. This conclusion transmits an important message to managers of restaurants and tourism officials about the crucial importance to the sector of highly qualified and service-oriented

employees and emphasizes the critical role that service quality plays in customer retention.

The contributions of this study to customer loyalty research are twofold. First, it has successfully applied the traditional conceptualization of customer loyalty in a new service context that is different from the marketplace examined in prior research. Second, the service orientation-customer loyalty model confirms that employee's service orientation and service quality are key factors of purchase loyalty. Since these are intangible resources that are difficult to imitate, their importance is reinforced as strategic factors for improving competitiveness and for the success of restaurant operators. It is also suggested in this study that service orientation, in itself, does not have a significant direct effect on customer loyalty, but has an indirect positive effect by improving service quality.

The managerial contributions of the study are important to service organizations in several ways. Because managers can identify the antecedents of customer loyalty and understand the impact of these antecedents on customer loyalty, they can identify the set of relationships between employees and customers that influence customer loyalty, then they can allocate resources and set up mechanisms and practices that enhance the relationships that organizations develop with their customers, potentially resulting in higher levels of customer loyalty.

From a theoretical perspective, the study provides an explanation of the nature of the link between employee service orientation, service quality and customer loyalty, and how employees' service orientation influences customer loyalty. The study shows that employee service orientation does not directly influence customer loyalty, but that employee's service orientation impact on the customer loyalty via their influence on perceived service quality.

The empirical study has several limitations that can be addressed in the future research. First, the present research considered a single key-informant approach, which may also raise some uncertainty as to potential single-method bias and reliance on perceptual measures, which are subject to cognitive biases. Thus, caution needs to be taken when generalizing our findings and discussion to other service categories or user groups. It is imperative to validate our proposed loyalty model with different user populations in different contexts. In order to reduce the threat of common method variance bias and enhance causal inference it will be also valuable for further research (1) employing multiple respondents, (2) obtaining multiple types of data, or (3) adopting a longitudinal approach (Podsakoff et al., 2003; Rindfleisch et al., 2008). Second, we did not incorporate firm level outcomes (e. g. prices, location, promotion, etc.) in the proposed model. Prior studies suggested that market share increases as purchase loyalty increases, and that relative price increases as attitudinal commitment increases (Chaudhuri & Holbrook, 2001). Third, the study design was also limited to one geographical region, which faces similar external environment pressures. It is believed, however, that these results are indicative of the major issues facing restaurants today.

Since the study is cross-sectional, concerning the conceptual model, the use of SEM alone does not test causality between variables. Future research could analyze causal relationships using inferred causation theory (Mazanec, 2007). Longitudinal evidence might enhance our understanding of the causality and interrelations between or among variables important to customer loyalty in services (Gómez et al., 2004).

These limitations, however, provided a number of insights or areas of improvement for future research. The conceptual model could be extended by including performance as a dependent variable. As suggestions for future research, we consider it would be worth studying the synergistic effect of the three variables of the model on improvement of the performance of restaurants.

References

Akter, S., D'Ambra, J., & Ray, P. (2010). *Service quality of health platforms: Development and validation of a hierarchical model using PLS*. Electron Markets.

Augustyn, M., & Ho S. (1998). Service quality and tourism. *Journal of Travel Research, 37*(1), 71-75.

Anderson, E., Fornell, C., & Lehmann, D. (1994). Customer satisfaction, market share and profitability: Findings from Sweden. *Journal of Marketing, 58*(3), 53-66.

Asubonteng, P., McClearly, K., & Swan, J. (1996). SERVQUAL Revised: A critical review of service quality. *Journal of Services Marketing, 10*(6), 62-81.

Bentler, P. (2006). *EQS: Structural equations program manual – Multivariate Software*. CA: Inc. Encino.

Brady, M., & Cronin, J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing, 65*, 34-49.

Clarke, A., & Dawson, P. (1999). *Evaluation research: An introduction to principles, methods and practice*. London: Sage Publications.

Chahal, H., & Kumari, N. (2010). Development of multidimensional scale for healthcare service quality (HCSQ) in Indian context. *Journal of Indian Business Research, 2*(4), 230-255.

Chaudhuri, A., & Holbrook, M. (2001). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*, 64-73.

Cronin, J., & Taylor, S. (1992) Measuring service quality: A eeexamination and extensión. *Journal of Marketing,* 56(3), 55-68.

Dabholkar, P., Thorpe, D., & Rentz, J. (1996). A Measure of Service Quality for Retail Stores: Scale Development and Validation. *Journal of the Academy of Marketing Science, 24*, 3-16.

Dagger, T., Sweeney, J., & Johnson, L. (2007). A hierarchical model of health service quality scale development and investigation of an integrated model. *Journal of Service Research, 10*(2), 123-142.

Dienhart, J., Gregoire, M., & Downey, R. (1991). Service orienta- tion of restaurant employees. *Hospitality Research Journal, 12*(2), 421-429.

Dotchin, J., & Oakland, J. (1994). Total quality management in services: Part 2 service quality. *International Journal of Quality & Reliability Management, 11*(3), 27-42.

Ganesh, J., Arnold, M., & Reynolds, K. (2000). Understanding the customer base of service providers: An examination of the differences between Switchers and Stayers. *Journal of Marketing, 65*(3), 65-87.

Gómez, M., Mclaughlin, E., & Wittink, D. (2004). Customer satisfaction and retail sales performance: An empirical investigation. *Journal of Retailing, 80*(4), 265-278.

Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing, 18*(4), 36-44.

Groves, J. (1992). *Perceived Service Orientation of Restaurant Employees*. Unpublished Thesis, Kansas State University, Manhattan, Kansas State, USA.

Hair, J., Black, W., Barry, B., & Anderson, R. (2009). *Multivariate data analysis (7th Ed.)*. NY: Pearson Education, Upper Saddle River.

Hogan, J., Hogan, R., & Busch, C. (1984). How to measure service orientation. *Journal of Applied Psychology, 69*(1), 167-173.

Jones, T., & Sasser, W. (1995). Why satisfied customers defect. *Harvard Business Review, 73*(November-December), 88-99.

Ko, Y. (2000). *A multidimensional and hierarchical model of service quality in the participant sport industry*. Ohio State University, Columbus, Ohio State, USA.

Lewis, B., & Mitchell, V. (1990). Defining and measuring the quality of customer service. *Marketing Intelligence & Planning, 8*(6), 11-17.

Mazanec, J. (2007). New frontiers in tourist behaviour research: Steps toward causal inference from non-experimental data. *Asia Pacific Journal of Tourism Research, 12*(3), 223-235.

Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill Book Company.

Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing, 49*(fall), 41-50.

Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(spring), 12-40.

Parasuraman, A., Berry, L., & Zeithaml, V. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing, 67*(winter), 421- 450.

Parasuraman, A., Berry, L., & Zeithaml, V. (1993). Research Note: More on Improving Service Quality Measurement. *Journal of Retailing, 69*(1), 140-147.

Parasuraman, A., Zeithaml, V., & Berry, L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research. *Journal of Marketing, 58*(February), 6-17.

Podsakoff, P., MacKenzie, S., Lee Jeong-Yeon, & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Pollack, B. (2009). Linking the hierarchical service quality model to customer satisfaction and loyalty [Research paper]. *Journal of Services Marketing, 23*(1), 42-50.

Rindfleisch, A., Alan, J., Shankar, G., & Moorman, C. (2008). Cross- sectional versus longitudinal survey research: Concepts, findings, and guideline. *Journal of Marketing Research, 45*(3), 261-279.

Robinson, S. (1999). Measuring service quality current thinking and future requirements. *Marketing Intelligence & Planning, 17*(1), 21-32.

Rust, R., & Oliver, R. (1994). Service quality: Insights and manegerial implications from the frontierin service quality: New directions in theory and practice. London: Sage Publication.

Seth, N., Deshmukh, S., & Vrat, P. (2005). Service quality models: A review. *International Journal of Quality & Reliability Management, 22*(9), 913-949.

Shahin, A., & Samea, M. (2010). Developing the models of service quality gaps: A critical discussion. *Business, Management and Strategy, 1,* pp 1-11.

Stevens, P., Knutson, B., & Patton, M. (1995). DINESERV: A tool for measuring service quality in restaurants. *The Cornell Hotel and Restaurant Administration Quarterly, 36*(2), 56-60.

Van Iwaarden, J., Van der Wiele, T., Ball, L., & Millen, R. (2003). Applying SERVQUAL to web sites: An exploratory study.

International Journal of Quality & Reliability Management, 20(8), 919-935.

Wisniewski, M. (2001), Using SERVQUAL to assess customer satisfaction with public Sector services. *Managing Service Quality*, *11*(6), 380-399.

Wisniewski, M., & Donnelly, M. (1996). Measuring service quality in the public sector: The potential for SERVQUAL. *Managing Service Quality*, *7*(4), 357-365.

Zeithaml, V. (2000). Service quality, profitability, and economic worth-of-customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science, 28*(1), 67-85.