Servqual for restaurant essay

Business, Industries

Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Vera Patricio (vera. l. pt) Rogerio Puga Leal (unl. pt) Faculty of Science and Technology, Universidade Nova de Lisboa, Portugal Zulema Lopes Pereira (unl. pt) Faculty of Science and Technology, Universidade Nova de Lisboa, Portugal SERVQUAL is the most popular instrument to ascertain service quality.

However, some debate exists about its ability to characterize different service environments. Furthermore, there is not a consensus about the inclusion of customer expectations in the model. The research presented in this paper intends to discuss the applicability of SERVQUAL to restaurant services and to analyze the inclusion of customer expectations in such environment. The research was developed in a Portuguese resort and more than 300 customers, from two different restaurants, were invited to participate in the study. Abstract Introduction It has been well recognized the crucial role played by service organizations in developed countries, being quality and corresponding customer satisfaction essential to increase the effectiveness, efficiency and competitiveness of these organizations (Leal and Pereira, 2003). Tourism industry has become not only a driver for economic progress of many countries, of which Portugal is a good example, but also a vehicle to approximate people and cultures.

Various policies have been issued and several initiatives aimed at improving tourism quality have also been fostered and implemented by private and public organizations all over the world. Despite these facts, it has been acknowledged both by tourists and public authorities that the level of quality has to be enhanced rapidly in all tourism activities, catering included. Being

SERVQUAL the most utilized model in service quality research and applications, it seems interesting to analyze how well the SERVQUAL structure can be applied to restaurant services. SERVQUAL was originated in 1988 and it was founded on the conceptual model developed by Parasuraman et al. (1985). The early work of these researchers was based on the comparison of service performance against a single expectation standard. According to this, perceived service quality can be expressed as follows: Perceived service quality = perceived service (P) – expected service (E)Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Despite the recent multi-expectation approaches advocated by several authors (e.

g. Johnston, 1995; Wirtz and Bateson, 1999; Walker and Baker, 2000), the work presented in this paper is based on the aforementioned single expectation standard. Thus, the original SERVQUAL instrument (Parasuraman et al. , 1988) is used to assess customer’s expectations and perceptions. The instrument includes five dimensions of service quality (Zeithaml et al, 1990). To ascertain the quality of service provided by a restaurant, the following 22 items were considered within these dimensions: Tangibles (four items) 1. Restaurant has modern-looking equipment 2. The physical facilities are visually appealing 3.

Employees are neat-appearing 4. Materials associated with the service are visually appealing Reliability (five items) 5. When the restaurant promises to do something by a certain time, it does so 6. When a customer has a problem, the restaurant shows a sincere interest in solving it 7.

The restaurant performs the service right the first time 8. Services are provided at the time the restaurant promises to do 9. The records are error-free Responsiveness (four items) 10. Employees tell customers when services will be performed 11. Employees give prompt service to customers 12. Employees are willing to help customers 13. Employees are never too busy to respond to customer's requests Assurance (four items) 14.

The behaviour of employees instil confidence in customers 15. Customers feel safe in their transactions 16. Employees are consistently courteous 17. Employees have the knowledge to answer customer's questions Empathy (five items) 18. Restaurant gives individual attention to the customer 19.

Employees give personal attention to customers 20. Restaurant understands specifics needs of its customers 21. Restaurant has customer's interest at heart 22.

Operating hours are convenient to all customers The questionnaire contained two sections, namely an expectations section consisting of 22 generic statements about restaurants and a matching set of company-specific statements to assess perceptions. As customer expectations and perceptions were separately collected, it was also possible to compare the " perception-minus-expectation" framework against the single performance framework. 128 Enterprise and Work Innovation Studies, No.

2, 2006 IET, Monte de Caparica, Portugal Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Data Collection Two restaurants of different segments were selected to perform the study.

Restaurant A has 60 seated places. It delivers complete meals in a formal environment. By contrast, Restaurant B is targeted to serve light meals in a very informal environment. It has 70 seated places.

A convenience sample of 150 customers (75 female and 75 male) was collected for each restaurant. All respondents were Portuguese citizens and the questionnaires were gathered from December 2002 to April 2003. Beyond the 22 items of SERVQUAL, an extra item related to customer's global satisfaction was added to the questionnaire. Exploratory Data Analysis As mentioned before, it was decided to compare how well the presented SERVQUAL structure could be replicated for Portuguese restaurant services under two perspectives: " Perception-minus-expectation" framework against the performance framework. These two perspectives led to different exploratory factor analysis approaches.

One of the approaches considered the score differences (perceptions minus expectations), for each item of the questionnaire, as the input, while the other just considered the perceptions. First of all, it was important to decide if Factor Analysis was the appropriate technique for analyzing the available data. The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy and the test of sphericity were carried out for each of the aforementioned approaches, both for segments A and B. Table 1 presents these results and reveals that Factor Analysis is appropriate for the subsequent analysis. Table 1. KMO's and tests of sphericity Segment B Segment A P-E P P-E P KMO 0.

707 0. 785 0. 622 0. 648 Approx.

Chi-Square 1882. 754 2400. 783 720. 978 1082.

181 df 231 231 231 231 0. 000 0. 000 0. 000 0. 000 Sig. Bartlett’s Test of Sphericity Principal Component Analysis and the Kaiser criterion were used, respectively, for factor extraction and factor retention, leading to the results displayed in Table 2. In general, one can notice that the number of extracted factors differs from the SERVQUAL 5-factor structure.

Nevertheless, it is worth referring that some authors defend the existence of seven to eight factors in service quality (e. g. Carman, 1990). Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal 129 Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort The results are considerably poorer for segment B.

As later component rotation for this segment did not produce a meaningful structure, it was discarded from further analysis. Probably, more research on sampling plans and data acquisition is needed for segment B, as well as further improvement in the administration of the questionnaire. Table 2. Number of factors and explained variance Segment A P-E P Number of extracted factors Total variance explained (%) 7 74. 937 5 70. 488 Segment B P-E P 8 63.

912 8 64. 243 As regards segment A, the communalities for the variables of each framework are presented in Tables 3 and 4. Table 3. Communalities for Segment A (P-E)Communalities – 7 Components Extracted (P-E) Variable PE1 PE2 PE3 PE4 PE5 PE6 PE7 PE8 PE9 PE10 PE11 PE12 PE13 PE14 PE15 PE16

PE17 PE18 PE19 PE20 PE21 PE22 Initial 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Extraction 0. 777 0. 766 0. 762 0.

757 0. 749 0. 792 0.

648 0. 796 0. 622 0. 706 0. 682 0. 794 0.

760 0. 835 0. 687 0. 604 0.

672 0. 937 0. 943 0.

655 0. 729 0. 814 Table 4. Communalities for Segment A (P) Communalities – 5 Components Extracted (P) Variable P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 Initial 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 Extraction 0.

635 0. 794 0. 684 0. 10 0. 737 0. 766 0. 668 0.

713 0. 661 0. 654 0.

592 0. 791 0. 751 0. 776 0. 769 0. 695 0. 429 0. 877 0.

889 0. 551 0. 748 0. 617 Interpretation of “ Perception-minus-expectation” framework Table 5 presents the rotated component matrix for the “ perception-minus-expectation” framework. 130 Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Table 5. Rotated Component Matrix for Segment A (P-E) Component 1 PE6 PE14 PE15 PE7 PE16 PE5 PE10 PE22 PE4 PE8 PE9 PE1 PE2 PE3 PE18 PE19 PE13 PE12 PE11 PE17 PE20 PE21 0. 19 0.

747 0. 739 0. 718 0. 677 0. 675 0. 601 0.

120 0. 272 0. 439 0. 143 -0. 019 0. 129 0. 306 0. 103 0.

226 -0. 005 0. 191 0.

074 0. 169 -0. 052 0. 103 2 0.

048 0. 276 0. 016 0. 188 0. 055 0.

235 -0. 118 0. 846 0. 711 0. 708 -0. 523 0. 125 -0.

101 -0. 055 0. 045 0. 041 -0.

279 0. 278 0. 000 0. 162 0. 023 -0. 544 3 0. 334 -0.

074 0. 002 0. 281 -0. 057 0. 116 -0. 281 -0. 187 0.

273 0. 137 0. 110 0.

831 0. 765 0. 698 0. 095 0. 069 0.

067 -0. 098 0. 410 -0. 032 -0. 001 -0. 039 4 0.

071 0. 219 0. 067 0. 079 0. 008 0.

193 0. 173 0. 031 0. 107 0.

155 0. 106 0. 056 0. 164 -0. 023 0. 954 0.

937 -0. 43 0. 047 0. 075 -0. 075 0. 047 0. 186 5 0. 005 0.

202 0. 137 0. 102 -0.

101 -0. 264 0. 287 0. 125 -0.

214 -0. 029 0. 227 0.

215 0. 088 -0. 153 0. 012 0. 016 0. 804 0.

657 0. 655 0. 036 -0. 016 0. 200 6 0. 040 0. 321 0. 066 0.

006 0. 165 0. 308 -0. 292 0. 120 0. 060 0. 229 0. 503 -0.

052 -0. 122 0. 375 -0. 050 0. 018 0. 110 0. 469 -0. 205 0.

780 0. 030 0. 052 7 -0. 027 0. 065 0. 337 -0. 030 -0.

320 -0. 150 0. 233 -0. 132 0. 206 -0. 069 0. 013 -0. 137 0.

324 -0. 116 0. 058 0. 083 0. 132 0. 127 -0.

178 0. 037 0. 805 0.

585 According to Hair et al. (1995), only factor loadings above 0. 00 can be considered significant for the considered sample size. Although a meaningful structure appears to emerge, it must be noticed that some variables are not easy to allocate to a single factor (e. g. variables 21 and 9). Factors 4 and 7 include the variables that belong to the “ Empathy” dimension of SERVQUAL.

However, it seems that customers tend to consider separately the “ individual attention”, which seems logical due to the type of service provided. Factor 5 generically includes those variables that SERVQUAL assumes to represent the “ Responsiveness” dimension. The only item excluded is PE10, which is regarded as a variable more related to reliability

by restaurant customers. In fact, this variable is included, together with variables 5, 6 and 7, in factor 1. This result can be considered logical, as PE10 represents, in a large scale, a reliability characteristic. Factor 1 also includes variables 14 and 15 that reflect confidence and safety, i.

e. , issues strongly related to reliability. Factor 3 includes the variables associated to " Tangibles" in SERVQUAL, with the exception of variable 4. Factor 2 includes variables 8 and 22. It is not a surprise that they are grouped together. In fact, both variables are related to time characteristics.

This factor also includes, with slightly lower factor loading, variable 8, which is not easy to explain. Finally, factor 6 includes variables 9 and 17. Variable 9 could be included either in factor 6 or 2, although the inclusion in factor 6 appears to be more sensible. In fact, variables 9 and 17 are both related to the technical skills of the employees. Enterprise and Work Innovation Studies, No.

2, 2006 IET, Monte de Caparica, Portugal 131 Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resortInterpretation of Single perception framework Table 6 presents the rotated component matrix for the performance framework. Table 6. Rotated Component Matrix for Segment A (P) Component 1 P4 P22 P15 P20 P9 P14 P8 P3 P6 P16 P5 P7 P18 P19 P21 P10 P13 P12 P11 P17 P2 P1 0.

789 0. 748 0. 711 0.

685 -0. 652 0. 573 0. 515 0. 024 0. 376 0. 257 0. 093 -0.

065 0. 089 0. 117 0.

322 -0. 350 -0. 220 0. 256 -0. 129 0. 366 0. 261 -0. 322 2 0.

100 0. 192 0. 322 0.

090 0. 081 0. 428 0.

479 0. 773 0. 755 0. 750 0.

737 0. 588 -0. 034 0. 080 0.

302 0. 138 0. 114 0.

082 0. 219 0. 273 0. 015 0. 168 3 0. 56 0.

100 0. 179 0. 062 0. 108 0. 304 0.

452 -0. 227 0. 098 0. 036 0. 370 0.

386 0. 929 0. 921 0. 583 0. 467 0. 159 0. 088 0. 183 -0.

068 -0. 073 -0. 053 4 -0. 234 -0. 066 0. 330 0. 134 0.

466 0. 394 0. 120 0. 023 0. 149 0. 169 0. 219 0.

177 0. 066 0. 135 0.

459 0. 301 0. 813 0. 805 0. 685 0. 397 0.

001 0. 183 5 0. 141 -0. 074 0. 135 -0.

228 0. 014 0. 129 -0. 014 0. 184 0. 152 -0.

190 0. 009 0. 372 -0. 024 -0. 057 -0. 055 0. 452 -0.

057 0. 252 0. 156 -0. 242 0. 849 0. 683 Generally speaking, a structure with some meaning, and some similarities to the (P-E) framework, appears to emerge.

However, it must be stressed that the number of items whose allocation is not immediate (variables 8, 10, 14, 17 and 21) increases and that there are factors whose interpretation is far from being straightforward. Factor 1, for instance, combines variables from several SERVQUAL dimensions and does not offer an easy interpretation. Regardless the considered framework, variables associated to service customization tend to be aggregated, as happens with variables 18, 19 and 21 Variables 5, 6 and 7, belonging to SERVQUAL's Reliability, are grouped together with variables 3 and 16. The inclusion of variable 16 in this factor is acceptable, as it regards behavior consistency, which can be easily linked to reliability.

When compared to (P-E) framework, variables 11, 12 and 13 are still included in the same factor – Responsiveness. Finally, as regards Tangibles, restaurant's facilities (variables 1 and 2) tend to be separately considered from those concerning employee's appearance and materials associated to service delivery, which makes some sense. Single perceptions framework was also analyzed without the utilization of Kaiser Criterion, forcing the extraction of 7 factors.

A unique variable factor emerged, being the others quite similar to the 5-factor structure presented above. 132 Enterprise and Work Innovation

Studies, No. 2, 2006 IET, Monte de Caparica, Portugal Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Table 7 presents a summary of the variables allocated to each factor in each framework. Table 7. Comparison of structures for frameworks (P-E) and (P) Segment A (P-E) Factor 1 Factor 2 Factor 3 Factor 4 Factor 5 Factor 6 Factor 7 PE5, PE6, PE7, PE10, PE14, PE15, PE16 PE4, PE8, PE22 PE1, PE2, PE3 PE18, PE19 PE11, PE12, PE13 PE17, PE9 PE20, PE21 Segment A (P) P4, P22, P15, P20, P9 P3, P6, P16, P5, P7 P18, P19, P21 P11, P12, P13 P1, P2 Hard to allocate P8, P10, P14, P17, P21 Thus, despite some interesting insights provided by the perceptions framework, it must be recognized that a more consistent structure was achieved trough the " perceptions-minusexpectations" framework. Therefore, the later, and not the former, will be used to develop the next stage of the study. Summarizing, a structure for service quality in restaurants can be proposed as presented in Table 8.

Table 8. Structure for service quality in restaurants Name of the factor Factor 1 Factor 2 Factor 3 Factor 4 Factor 5 Factor 6 Factor 7 Reliability Time Convenience Tangibles Customization Responsiveness Technical Skills Empathy Surrogate Variable PE6 PE22 PE1 PE18 PE13 PE17 PE20 Guidelines for Management From a management perspective, it is vital to identify the areas where greater efforts should be allocated. Beyond the obvious approach, that areas poorly rated by customers should be carefully looked at, it is important to identify which factors more strongly affect customer's satisfaction. To achieve this objective, a multiple regression model was developed. The global satisfaction of customers (extra item added to the

questionnaire) was considered the dependent variable, being the several factors the independent variables.

Each factor is represented by a surrogate representative variable (Table 8), which is the variable with the highest factor loading for that particular factor (Hair et al, 1995). The standardized regression Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal 133 Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort coefficients might constitute a good approach to the weight given by customers to the several factors. A stepwise procedure was adopted to select variables. Variables PE1 (Tangibles) and PE13 (Responsiveness) were not included in the model in any step.

Table 9 shows the evolution of RSquare. A value circa 50% was obtained, which is quite reasonable for this type of study. Table 9. Evolution of R Square Model Summary Model 1 2 3 4 5 R 0.

25 0. 650 0. 673 0. 690 0. 704 R Square 0. 276 0.

422 0. 453 0. 476 0. 495 Adjusted R Square 0.

271 0. 414 0. 441 0.

461 0. 478 a Predictors: (Constant), PE6 b Predictors: (Constant), PE6, PE22 c Predictors: (Constant), PE6, PE22, PE18 d Predictors: (Constant), PE6, PE22, PE18 e Predictors: (Constant), PE6, PE22, PE18 The regression coefficients for the final model are shown in Table 10. Table 10.

Regression Coefficients Unstandardized Coefficients Model 5 (Constant) PE6 PE22 PE18 PE20 PE17 B 5. 760 0. 299 0. 102 0. 118 0. 052 0. 102 Std. Error 0.

079 0. 041 0. 017 0. 042 0. 021 0. 044 Standardized Coefficients Beta 0.

445 0. 369 0. 173 0. 49 0. 143 t 73. 039 7.

255 6. 112 2. 836 2. 496 2.

341 Sig. 0. 000 0. 000 0. 000 0. 005 0. 014 0. 021 a Dependent Variable: SatisglobA A relative weight for each factor can be calculated from the standardized coefficients presented in Table 10: Relative importance of factor i = ? i ?? j j = 1 k Table 11 shows these relative weights.

134 Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Table 11. Relative weight of the factors Factor Reliability Time Convenience Customization Technical Skills Empathy Relative Weight (%) 34. 28.

9 13. 5 11. 1 11. 7 The highest importance attributed to Reliability is consistent with the findings of several other authors, including Parasuraman et al. (1991). However, the dimension “ Time Convenience”, which reflects the operating hours of the restaurant as well as its ability to provide the service on time, also reveals a very high weight which is not surprising according to the type of service. Therefore, it seems that an enlargement of

the operating hours might have a very positive impact on customer satisfaction.

Curiously, the variable representing the “ Tangibles” factor was not significant at the regression. Although a further study is needed, it is not possible to exclude that “ Tangibles” are a sort of basic characteristics under Kano’s perspective. Conclusions The importance of SERVQUAL within service quality research is unquestionable. However, as SERVQUAL is a general model, it is always interesting to discuss its applicability to specific service environments. This is was the aim of this research focused on Portuguese restaurants.

Nevertheless, it must be recognized that convenience sampling was adopted, which reinforces the exploratory nature of the study and the necessity of confirming the presented results with further research. Despite some similarities, the SERVQUAL structure was not fully replicated in none of the analyzed frameworks. Single performance framework (P) produced a 5-factor structure, like SERVQUAL, but with some differences in variables allocation. On the other hand, “ perceptionminus-expectation” framework produced a final structure with seven factors, which is consistent with several others presented in literature, which can be considered meaningful and challenging to analyze. It is very interesting to notice the emergence of a factor that reflects individual attention given to customers. This is completely aligned with current marketing trends and must constitute a strategic driver for the tourism industry. The items contained in the original SERVQUAL dimensions of “ Reliability” and “ Assurance” are merged into a

single factor, reflecting that restaurant’s customers do not differentiate those issues. Time convenience appeared as a significant factor, revealing an increased demand of customers for service availability. The non-significance of tangibles is somehow surprising. Although further research is needed, it seems that tangibles are a sort of basic characteristics under Kano’s perspective, i. . , only their lack of adequacy is noticed. As a general conclusion, it can be said that soft and hard skills of the employees, obtained through their technical and relational education with a strong focus on service customization, are key factors to success. Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal 135 Applicability of SERVQUAL in restaurants: an exploratory study in a Portuguese resort Finally, it is worth mentioning that the enlargement of operating periods, despite the associated costs, also constitutes an important measure to fulfil customer’s requirements. References Carman, James M. (1990) – Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions, Journal of Retailing; Vol. 66, No. 1; Spring 1990, pp 33-55. Hair, Joseph, Anderson, Rolph, Tatham, Ronald, Black, William (1995)- Multivariate Data Analysis with Readings, 4? ed. , New Jersey, Prentice-Hall Inc. Johnston, R. (1995), The Zone of Tolerance: exploring the relationship between service transactions and satisfaction with the overall service, International Journal of Service Industry Management, Vol. 6 No. 2, pp. 6-61. Leal, R P. and Pereira, Z. L. (2003), Service Recovery at a financial institution, International Journal of Quality and Reliability Management, Vol. 20 No. 6, pp. 646-663. Parasuraman, A. , Berry, L. and Zeithaml, V. A. (1991), Understanding customer expectations of service,

Sloan Management Review, Spring, pp. 39-48. Parasuraman, A. , Zeithaml, V. A. and Berry, L. L. (1988), SERVQUAL: A MultipleItem Scale for Measuring Consumer Perceptions of Service Quality, Journal of Retailing, Vol. 6 No. 1; Spring, pp. 12-40. Walker, J. and Baker, J. 2000), An exploratory study of a multi-expectation framework for services, Journal of Services Marketing, Vol. 14 No. 5, pp. 411431. Wirtz, J. J. and Bateson, J. E. G. (1999), Introducing uncertain performance expectations in satisfaction models for services, International Journal of Service Industry Management, Vol. 10 No. 1, pp. 82-99. Zeithaml, Valarie A. , Parasuraman, A. , Berry, Leonard L. (1990) – Delivering Quality Service: Balancing Customer Perceptions and Expectations; The Free Press, A Division of Macmillan, Inc. 136 Enterprise and Work Innovation Studies, No. 2, 2006 IET, Monte de Caparica, Portugal