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The User Gap (Perceptions-Expectations) in Tourism Accommodation Services in Mérida State, Venezuela[1]

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ABSTRACT:
The present research focuses on service quality in tourism accommodation, measured using a combination of the Servqual model, which measures quality from the user's/turist's perspective, and the 5-gaps model, in an attempt to account for the discrepancy between client expectations and perceptions. The measurement allows us to infer a service quality shortfall given that expectations exceed perceptions. A quality shortfall was noted in both seasons. Moreover, differences in average Servqual scores were found to exist only among the user groups defined by their level of education and earnings.

Keywords: service quality, tourism, Servqual model, five gaps model

RESUMEN:
La presente investigación sobre la calidad del servicio turístico, utilizando una combinación del modelo de Servqual, que mide la calidad de la perspectiva del usuario/turista, y el modelo 5 brechas, en un intento de explicar la discrepancia entre las expectativas y las percepciones de los clientes. La medición permite que deduzcamos un déficit de calidad del servicio dado que las expectativas sobrepasan las percepciones. Un déficit de calidad fue notado en ambas temporadas de turismo. Además, las diferencias en los resultados promedios del modelo Servqual sólo se encontraron entre los grupos de usuarios definidos por su nivel de educación e ingresos.

Palabras clave: calidad del servicio, turismo, modelo de Servqual, modelo de las cinco brechas.

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Introduction

In the context of the current Venezuelan (Mérida State) development strategies, many advocate strengthening tourism to complement the country's existing economic structure, particularly given tourism's employment and growth potential.

In order to be competitive in the tourism sector and to put in place actions and strategies to improve service quality, one first needs is to obtain information using models for measuring service quality in tourist accommodation. To that end, research was carried out to analyse the quality of tourism accommodation services in Mérida, using the Servqual model for measuring service quality and the service quality gap model, for the purpose of formulating strategies to help raise, maintain and monitor quality during and after service delivery.

This work is organised as followed: first, literature about quality conceptualization and its measurement is presented; second, methodology that includes objectives and hypotheses, data collection procedure and statistic analysis is applied; third, results; and finally, it ends with some conclusions and recommendations.

Background

Given that service quality is conceptualized from the customer perspective, so too must its measurement. While acknowledging, as Cantú (2006) does, that the intangible aspects of service cannot be quantified readily or fully, it is equally true that client expectations are commonly misinterpreted. Nevertheless, this situation should not serve as a pretext to avoid measuring expectations. On the contrary, as Denton (1991) and Pride and Ferrell (1997) argue, measurement is essential for service providers since it helps them know how they are evaluated by clients and why clients prefer some providers ahead of others. For Albercht (1990) and Denton (1991), evaluating service means closing the circle with a comprehensive feedback system that reinforces service quality, helping managers and employees take remedial action and constantly aim to increase the levels of quality. Otto and Ritchie (1996), for their part, argue

that measuring service quality contributes to an understanding of tourist satisfaction.

Certain characteristics of services can, according to Deming (1986), be measured easily (time taken to deal with a customer enquiry, number of complaints and employees, spaciousness of facilities), as can aspects or characteristics of basic manufactured goods: tangible aspects, to use Cantú's term (2006). One advantage of measuring service quality in the opinion of Deming (1986) is that customers react immediately to what they perceive to be good or bad service, whereas with tangible products this reaction comes with a delay, given the delivery and storage processes involved. However, service's unique characteristics (intangibility, heterogeneity, simultaneity of consumption and production, and perish ability) necessitate different customer evaluation processes to those used to evaluate goods.

For Lovelock and Wirtz (2008) and Zeithaml, Parasuraman and Berry (1985), the pioneers of service quality evaluation, customer-oriented performance measurements offer several advantages, although the same authors warn that the process is complex and multidimensional given that clients' judgement (perceptions) incorporates aspects associated with the service outcome and the delivery process. Accordingly, the inclusion of client expectations in the measurement has its risks because, if a client has low expectations of a service, any perception of the service will surpass his expectations even though this does not necessarily mean the service is of high quality. Moreover, evaluations of services which offer high credibility for clients may never succeed in knowing or evaluating whether the work was performed well due to the complex nature of the service. For this reason, clients use other dimensions (functional quality) which are easily measured but can differ greatly from the real outcome (technical quality).

Despite the above caveats, Lovelock (1997) notes that it is impossible to control something that cannot be measured. Without measurement, managers cannot identify the current position of their company, which is why Cantú (2006) and Denton (1991) view measurement as the basis for improvement.

For experts such as Cantú (2006), Díaz, F. et al. (2006), Gutiérrez (2001), Hoffman and Bateson (2002), service quality analysis

comprises a series of conceptual models and instruments that allow these models to be implemented for the purpose of evaluating service quality, including in tourist accommodation.

The present research focuses on service quality in tourism accommodation, measured using a combination of the Servqual model, which measures quality from the user/tourist perspective, and the 5-gaps model, in an attempt to account for the discrepancy between client expectations and perceptions. In effect, these discrepancies are statistically evaluated by a factorial analysis of variance (ANOVA), which allows measure not only individual but also combined effect of two or more factors (independent variables) over a quantitative variable (dependent) characterized by the difference between customer expectations and perceptions.

Expectations-Perceptions Gap Model

Service quality can be measured by considering the difference or gap between the value the client expects and that which he perceives, as conceptualized by Santomá (2004) in his study of hotel quality in a number of European cities[2]. Following Díaz, F. et al. (2006), service quality can be measured quantitatively using the coefficient shown in Figure 1 below:

Figure 1: Service quality coefficient

$$Q = \text{Quality perceived} / \text{Quality expected}$$

Source: From Díaz, F. et al. (2006, p. 289)

In this approach Díaz, F. et al. (2006) and Santomá (2004) indicate that the quality coefficient can produce three possible outcomes: quality is optimal when perceptions match expectations, giving a coefficient of 1. A coefficient below 1 indicates a quality shortfall: in the mind of the client the services are not quality services and he is

[2] As a general rule, the following equation is used: Quality = Perception – Expectations (Santomá, 2004).

unhappy because he has not received what he expected, that is, his service expectations exceeded his perceptions. Conversely, a coefficient above 1 indicates an excess of quality, which is not expected or requested by the user.

Five Dimensions/Criteria Model

Based on their extensive research, Zeithaml, Parasuraman and Berry (1985) identified 10 service-quality criteria or dimensions (credibility, courtesy, communications, access, tangibles, security, responsiveness, competence, reliability and understanding/knowing the client). A high degree of correlation was discovered between these variables, which were subsequently condensed into five more practical dimensions (tangibles, empathy, assurance, responsiveness and reliability) for use by tourist organizations.

Tangibles cover the aspects and physical appearance of all the elements involved in service delivery. These elements are extremely important given intangibility or lack of a physical product in the client transactions.

Empathy is the capacity to put oneself in the customer's shoes, to experience the feelings of another person (client) as if they were our own; it means 'not forgetting how the customer feels' through personalized attention, the accessibility of the services for the client and good communication with the latter.

Assurance reflects the knowledge and skills required to provide the service, as well as the courtesy, credibility, honesty and integrity of the service provider, along with security in the transactions, expressed in the form of the absence of risk or danger.

Responsiveness refers to a responsive attitude, punctuality, promptness and service vocation, as well as the capacity to respond to queries and deliver service, demonstrating a preparedness to do so.

Reliability refers to the ability or capacity to provide the promised service dependably and accurately, with consistency of performance.

Gap Model of Service Quality

Quality has been studied conceptually in terms of the gaps between the expectations and perceptions not just of clients but of service employees and managers also. This is the concept of service quality put forward by Parasuraman, Zeithaml and Berry in their 1985 work *A Conceptual Model of Service Quality and Its Implications for Future Research* and, later, in *Delivering Quality Service* (1990). The model has been studied and considered since then by a broad range of experts in tourism, marketing and services, including Hoffman and Bateson (2002), Kotler et al. (2005), Lovelock (1997), and Zeithaml and Bitner (2002).

According to Santomá (2004), even when a client's expectations are fully known and the service is designed to meet said expectations, service quality can often fall short due to the difference between expectations and perceptions, a situation known as the *client gap*, in which diverse factors play a part.

The second gap arises as a result of the failure to select the correct service design and standards. The third gap exists where the expectations of the clients have been understood clearly and the required design and standards have been put in place, but the systems, processes and individuals do not guarantee service implementation equal to (or above) the standards (Zeithaml and Bitner, 2002). The fourth gap arises when the service delivered fails to match what has been promised to the client.

Methodology

Objectives and Hypotheses

Objective 1: To establish the discrepancies which exist between user expectations and perceptions (user gap), when using the dimensions that determine quality in tourism accommodation services in Mérida State, in order to assess the quality of the services.

Specific objective 2: To determine the role of user income level, education, age and sex, when assessing discrepancies between expectations and perceptions, during high and low tourism seasons.

Hypothesis 1: User expectations with respect to tourism accommodation services in Mérida State are surpassed by the perceptions of the service received, and hence these can be considered quality services.

Hypothesis 2: Independent variables: income level, education, sex, and age of users affect the value reached by those discrepancies between customer expectations and perceptions during high and low tourism seasons.

Data collection

In line with the objectives and hypotheses of the research, and the background, which is strictly linked to the variables contained in the objectives and hypotheses, the section which follows will outline the methodological aspects aimed at identifying, collecting and processing the information required to verify the aforementioned objectives and hypotheses.

Target population

For the purpose of collecting the required data to study the reality outlined above and to achieve the objectives of the research and test the stated hypotheses, two target populations were defined: tourist accommodation and users.

As a prior step to the study of the target populations (accommodation and users), personal interviews were carried out with experts in the tourist sector. The information obtained assisted with the preparation of the definitive questionnaires. It should be noted that the content of questionnaires used are based on the Servqual scale, together with a section of user-demographic data. Although Cronin & Taylor (1992 and 1994), question how long and recurring Servqual is, besides that expectations are worthless, it is also considered that perceptions do not report the customer goals and values, or priority-service areas; therefore the use of Servqual responded to the need of knowing quantitatively the user expectations, and of studying comprehensively the service process.

TOURIST ACCOMMODATION

To determine the sample size for the first target population to be studied (tourist accommodation), the minimum number of units of analysis needed for a sample (n) was calculated to ensure a standard deviation, at worst, of 5% or less. For a total population of 346 accommodation establishments, the sample size selected was 186.

Having established the sample size, the next step was to determine the sampling procedure, bearing in mind that the studied population comprises various sub-groups of establishments, each with their own characteristics (different categories of tourist hotel, inns, motels, special establishments and others). For each of these levels, sub-levels (geographical location) were identified to ensure full representation of establishments throughout the State of Mérida. Simple random probability sampling was used for the final selection of sampling elements within each layer.

USERS

The following criteria were followed as regards the size and selection of the sample of tourist accommodation users: first, two time periods were considered for the data collection (high and low season), and, second, the visitor numbers in each season were considered.

Bearing in mind that the tourist population in Mérida State during high season (Carnival, Easter, school holidays and Christmas) exceeds 100,000 visitors (Infinite population size), the maximum variance criterion (Hernández et al., 2006; Scheaffer et al., 1997) was used to calculate the sample and a sample size of 400 subjects was established.

To determine the size of the low-season user sample it was considered that the number of tourists visiting Mérida State in the season is below 100,000 (Table 1) (Finite population size). Accordingly, it was established that the minimum number of units of analysis required for a sample (n) guaranteeing a standard error of 5% or less was 397 users.

Table 1: Average number of visitors to Mérida State according to season

SEASONS /Years	2000	2001	2002	2003	2004	2005	2006	2007	Arithmetic average
January - February	53,643	38,925	41,679	33,539	42,947	53,395	29,351	*	44021.30
Carnival	80,668	85,409	93,529	60,794	101,555	111,067	128,188	136,870	
March - April	45,522	20,469	55,409	59,097	64,041	20,560	*	*	44183
Easter	238,473	231,903	243,540	234,890	237,424	190,064	233,217	234,039	
April - May	51,857	36,655	54,256	88,128	89,328	90,137	*	*	68393.50
June - July	37,316	38,824	32,621	56,808	36,254	71,438	*	*	45543.50
School Holidays	170,461	223,664	184,946	236,610	244,268	259,798	270,230	*	
16 Sept. - October	52,618	49,321	28,788	50,933	50,957	48,778	*	*	46899.16
November - 14 Dec.	22,861	26,233	25,871	94,212	95,717	115,852	*	*	63457.66
Christmas	108,446	149,461	39,096	195,310	213,070	222,763	226,117	*	
TOTALS	**861,865**	**900,864**	**799,735**	**1,110,321**	**1,175,561**	1,163,292	*	*	52083.02

Source: Compiled from Cormetur data (2005, 2006, 2007a). * Figure not available.

The high season (400) and low season (397) user samples were distributed across the selected accommodation establishments in proportion to the number of beds in each randomly selected establishment.

The Systematic Random Probability technique (every Kth person) was used to select users from the establishment's guest register. In other words, once in the establishment, the surveyor, assisted by the staff, systematically chose at random the users to be questioned. The selection interval level was set as each K guest (N/n) registered in the establishment and the user was fully identified by the surveyor with a view to being questioned on their experiences at the end of their stay.

As far as the results, in order to test Hypothesis 1, several bilateral contrasts of the average value for each of the 22 statements of the Servqual scale were performed, as well as for expectations and perceptions level average (T-test related samples), and also a unilateral contrast of the average Servqual total score (single sample T-test). For comparing hypothesis 2, a factorial ANOVA was performed, taking into account the Servqual scores reported by users as the dependent variable, and as independent variables the income level, education, age and sex of users. Through this analysis, significant differences in Servqual scores could be measured among the diverse user groups classified according to age, sex, income, and education.

Analysis and Results

The following section describes the differences found between expectations and perceptions (the client gap), for the purpose of testing the hypotheses, followed by the results obtained according to the independent variables for the 22 expectations and perceptions statements/items.

Hypothesis 1: User expectations with respect to tourism accommodation services in Mérida State are surpassed by the perceptions of the service received, and hence these can be considered quality services.

This hypothesis comprises the variables client expectations and client perceptions, which were measured and compared using the Servqual scale. To test the hypothesis we attempted to find globally a level of expectations and level of perceptions that would allow comparison of the two variables. This was carried out in three ways. First by considering each of the 22 Servqual scale items; second, by analysing the scale as a Likert scale; third, by using the total Servqual scale score, as suggested by its creators and published in Zeithaml et al. (1993).

As Table 2 shows, the descriptive analysis of all 22 Servqual scale items found that the median levels of expectations were slightly higher than for perceptions, particularly during the high tourist season. The trend is illustrated in Figure 2, which also shows that in high season the one that splits the distribution into two halves (median) lies well below the high expectations level manifested by users, thus pointing to a shortfall in service quality, as reflected in many of the Servqual scale items.

The average level of service quality perception was found to be lower than the expectations level in the reliability and empathy dimensions in both the high and low seasons. Conversely, perceptions were found to closely match expectations in the assurance, responsiveness and tangibles dimensions (Figure 2). A calculation of the average level of expectations and perceptions of each Servqual scale item highlights differences in statements 1 and 4 concerning service reliability (fulfilment of promises and on-time service), in statement 6 concerning responsiveness (timely and sincere information), in statements 10 and 12, associated with assurance (employee trust and politeness), and in items 14 and 17 associated with empathy (individualized attention, awareness of needs and having customers' best interests at heart).

Table 2: Descriptive Statistics for Level of Expectations and Perceptions

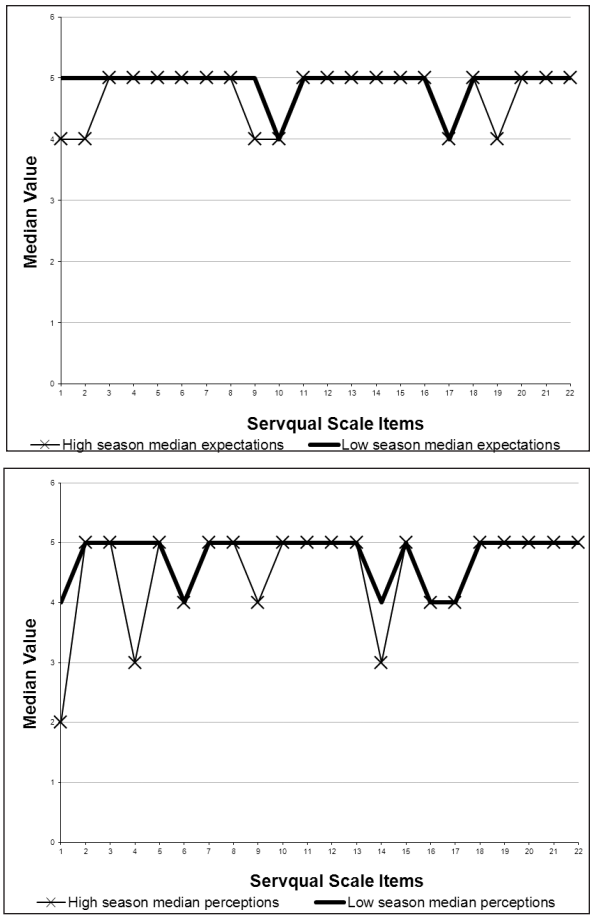
			Expectations				Perceptions			
		Tourism seasons	High		Low		High		Low	
		Servqual Scale Items	N Valid	Md	N Valid	Md	N Valid	Md	N Valid	Md
Reliability:	1	When the firm promises to do something by a certain time, they should do so	399	4	397	5	400	2	397	4
	2	When customers have a problem, the firm should show sincere interest in resolving it	398	4	397	5	400	5	397	5
	3	The firm should perform the service well habitually	399	5	397	5	399	5	397	5
	4	The firm should perform the service at the agreed time	400	5	395	5	399	3	397	5
	5	The firm should keep their records accurately	400	5	397	5	398	5	395	5
Responsiveness:	6	They should not be expected to provide prompt and sincere information on all conditions of the service*	397	5	397	5	400	4	397	4
	7	It is not realistic for all guests to expect prompt service from the firm's employees *	400	5	395	5	400	5	394	5
	8	Hotel employees do not always need to be willing to help customers *	400	5	396	5	400	5	397	5
	9	It is not important if they are too busy to respond to customer requests promptly*	400	4	397	5	400	4	397	5
Assurance:	10	Customers should be able to trust employees of the firm	400	4	396	4	399	5	397	5
	11	Customers should be able to feel safe in their transactions with the firm's employees	400	5	396	5	398	5	397	5
	12	The employees should always be polite	399	5	395	5	400	5	397	5
	13	The employees should get adequate support from the firm to do their jobs well	400	5	397	5	400	5	397	5

Empathy:	14	The firm should not be expected to give customers individualized attention*	400	5	397	5	400	3	397	4
	15	Employees of the firm should not be expected to give customers personal attention *	400	5	397	5	399	5	397	5
	16	It is unrealistic to expect employees to know what the needs of their customers are *	400	5	397	5	400	4	397	4
	17	It is unrealistic to expect the employees of the firm to have the customers' best interests at heart *	400	4	397	4	400	4	397	4
	18	The firm should not be expected to have operating hours convenient to the different types of customer *	399	5	397	5	399	5	397	5
Tangibles:	19	The firms should have up-to-date equipment and new technologies	400	4	397	5	399	5	397	5
	20	The firm's physical facilities should be comfortable and visually appealing	399	5	395	5	399	5	394	5
	21	The employees should be well dressed and appear neat	400	5	397	5	400	5	395	5
	22	The material elements and documentation associated with the service offered should be visually appealing	399	5	397	5	399	5	392	5

Source: Compiled using data collected by the author. Md: Median. 5: Entirely agree. 4: Moderately agree. 3: Neither agree nor disagree. 2: Moderately disagree. 1: Disagree entirely.

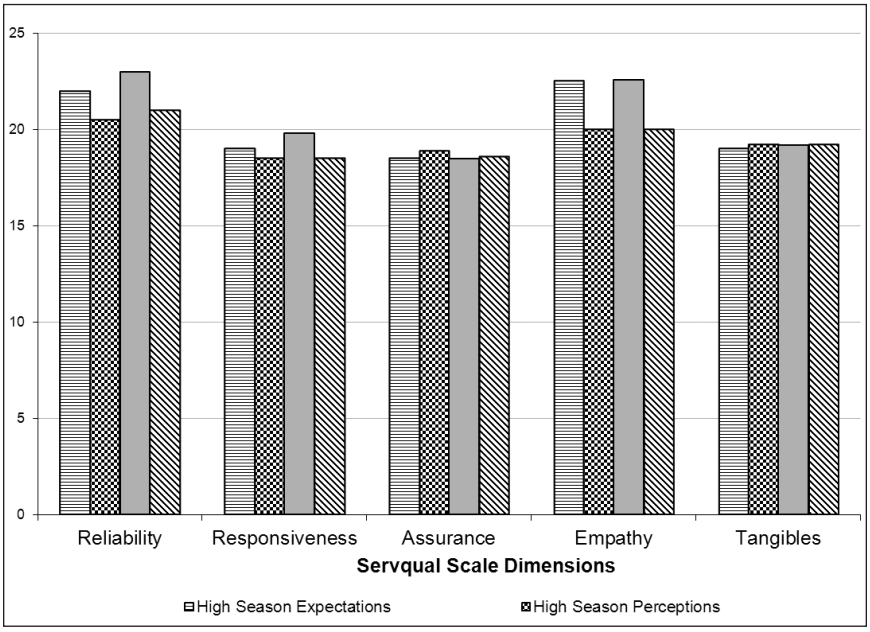
In order to infer the differences between service quality expectations and perception levels among users of Mérida State's tourist accommodation establishments and to identify the statements in which perceptions exceed expectations (and vice versa), a two-way contrast of the average value of each of the 22 Servqual scale items was carried out (T test of related or dependent variables). A critical level or probability associated with the contrast statistic below 0.05 ($p \leq 0.05$) allows us to infer with 95% confidence that, in all responses except items 11 and 19 in high season and 2, 3, 11 and 22 in low season, the average value of service expectations differs from that of perceptions.

Figure 2: Median of the Level of User Expectations and Perceptions according to Tourism Season



Source: Based on data collected by author.

Figure 3: Average expectations/perceptions level`



Source: Based on data collected by author.

Based on the confidence interval constructed for the difference in means, the T test also showed that, for the majority of the Servqual scale items (1, 4, 6, 7, 8, 9, 12, 14, 15, 16 and 17), expectations exceed perceptions in high season, indicating a shortfall in service quality. In the other items (2, 3, 5, 10, 13, 18, 20, 21 and 22) expectations are surpassed by perceptions. Similarly, in low season we can infer that excellent levels of service quality are observed in a large number of Servqual scale items (1, 6, 7, 8, 12, 14, 15, 16, 17, 19 and 20), whereas a quality shortfall is detected in the others (4, 5, 9, 10, 18 and 21). Most of the shortfalls are noted in the areas of responsiveness and empathy.

When the Servqual scale is analysed as a Likert scale (Table 3), designed to measure the level of users' expectations and perceptions concerning service delivery in their accommodation, we can see descriptively that the average expectations score obtained for all the establishments surveyed exceeds the average perceptions score in both high and low seasons, thus indicating a shortfall in service quality.

Table 3: Likert Scale for Measuring User Service Expectations and Perceptions

Total Likert Scale Score	(110- 88) Very high expectations and perceptions	(88 – 66) Moderately high expectations and perceptions	(66- 44) Indifferent	(44 – 22) Moderately low expectations and perceptions	(22 – 0) Very low expectations and perceptions
Season	**High**			**Low**	
Likert Score, Average Expectations	100.21			102.49	
Likerts Score, Average Perceptions	96.41			99.96	

Source: Based on data from Hernandez et al. (2006) and data collected by the author.

In order to further confirm the above and test Hypothesis 1, a T test was performed for dependent samples (two-way hypothesis contrast) in each of the two tourism seasons to infer differences between the average expectations and perceptions of Table 2. As the results given in Table 4 show, it can be stated with 95% confidence that significant differences exist between the average scores for expectations and perceptions, given that the critical value of the test is below 0.05 ($p \leq 0.05$) and the null hypothesis that assumes equal averages can therefore be rejected. The confidence interval values for the inferred difference show with 95% confidence that the expectations score is higher than the perceptions score (quality shortfall).

Table 4: Independent Samples T Test

Related sample statistics		Mean	N	Standard deviation	Mean standard error
Pair 1 High Season	Total Likert scale user expectation score	100.2100	400	5.3743	.2687
	Total Likert scale user perception score	96.4050	400	7.8972	.3948
Pair 1 Low Season	Total Likert scale user expectation score	102.4912	397	4.8879	.2453
	Total Likert scale user perception score	99.9597	397	6.5113	.3267

Related sample correlations		N	Corr.	Sig.
Pair 1 High Season	Total Likert user expectation score and Total Likert user perception score	400	-.006	.904
Pair 1 Low Season	Total Likert user expectation score and Total Likert user perception score	397	-.057	.258

Related Samples test		Related differences					t	df	Sig. (2-way)
		Mean	Standard deviation	Mean standard error	95% confidence interval of the difference				
					Upper	Lower			
Pair 1 High Season	Total user expectations score – Total user perceptions score	3.805	9.579	.4789	2.8634	4.7466	7.94	399	.000
Pair 1 Low Season	Total user expectations score – Total user perceptions score	2.531	8.361	.4196	1.7064	3.3564	6.03	396	.000

Source: Based on data collected by the author and processed with SPS statistics suite, version 15.

The second way to measure overall service quality is through the total Servqual score, obtained from the equation given in Table 5. According to the methodology proposed by Zeithaml et al. (1993), the arithmetic average of the scores per attribute should be calculated to find an overall measure of quality. Despite the negative Servqual scores obtained in some attributes (empathy, responsiveness, tangibles and reliability), the overall service quality score is close to 0 (Table 6), due largely to the high quality levels noted for assurance and tangibles in high season and for reliability and assurance in low season, which mathematically compensated the negative levels of the other attributes.

Table 5: Servqual Score

Servqual score: Service perceptions - Service expectations	
Servqual score = 0	Quality service
Servqual score > 1	Excellent or extraordinary level of quality
Servqual score < 1	Shortfall or lack of quality (deficient quality)

Source: From Zeithaml et al. (1993)

Table 6: Servqual Scores by Tourist Season

Season:	Reliability	Responsiveness	Assurance	Empathy	Tangibles	Global Measure of Service Quality:
High	- 0.343	- 0.240	0.109	- 0.541	0.159	- 0.171
Low	0.002	- 0.202	0.139	- 0.469	- 0.085	-0.123

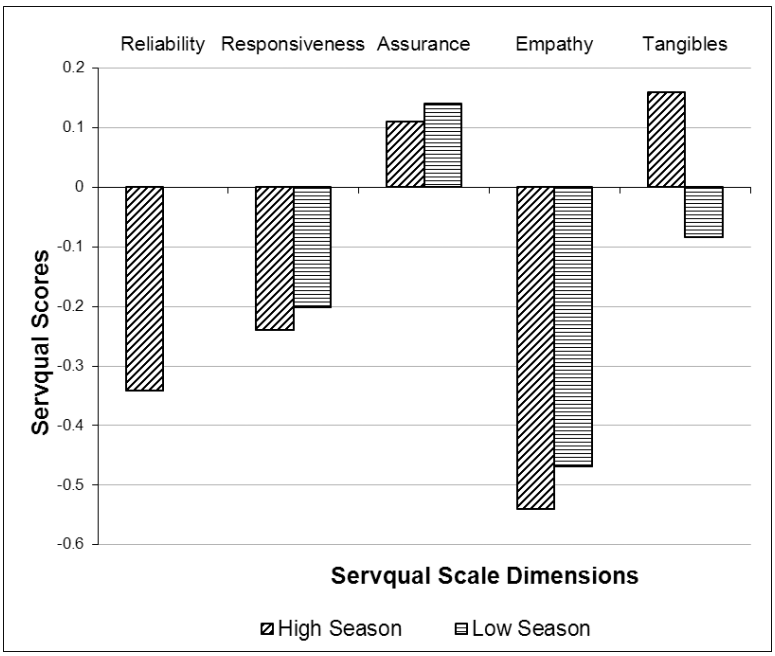
Source: Based on data collected by the author.

Having highlighted the differences between the two scores, the average Servqual score for each criterion is then calculated. Descriptively, the average total Servqual scores for the high and low seasons are -0.17 and -0.12 respectively (Table 6) and since these are not equal to 0 they indicate that expectations exceed perceptions. Figure 4 shows that in the reliability, responsiveness and empathy dimensions users have higher expectations than perceptions of the service in high season, which accounts for the negative Servqual scores. In other words, the services delivered by the accommodation establishments in these dimensions did not meet user expectations and a service shortfall occurs, a situation seen also in low season in the responsiveness, empathy and tangibles dimensions. Conversely,

scores in the assurance dimension were positive in both seasons, indicating an excellent or unexpected level of service (expectations surpassed by perceptions), as occurs also in the tangibles dimension in high season.

To infer the above results to all the population elements in order to test hypothesis 1, a one-sample T test was performed to check whether the average value of the total Servqual scale score is equal to zero (one-way contrast). As Table 7 shows, the critical level or probability associated with the contrast statistic (less than 0.05, p<= 0.05) leads us to reject with 95% confidence the null hypothesis that the average score equals zero. From the confidence interval limits constructed in the test for the value of the sample mean difference, the sample mean is found to be below the proposed value (0) and the total Servqual score is therefore negative. These results are similar for both the high and low seasons.

Figure 4: Servqual Scores for High and Low Season



Source: Based on data collected by the author.

The same T test for one sample (one-way contrast) was repeated in order to ascertain whether the average Servqual score for each of the dimensions of service quality equals zero in each of the two seasons studied. The test results indicate (Table 7) that, based on the critical level or probability associated with the contrast statistic (below 0.05, p<= 0.05), the null hypothesis that the average score is zero has to be rejected. In other words, in all the service quality dimensions the Servqual scores in both high and low seasons are different to the proposed value (0), except for the reliability dimension in low season.

From the confidence interval limits constructed in the test (Table 7) it can be seen that the sample mean for all the service quality dimensions in both seasons is lower than the proposed value (0), that is, the score obtained in the majority of the dimensions is negative, except for assurance in both seasons and tangibles in high season, which are positive. These results are similar to those observed descriptively in Figure 4.

Table 7: T test for one Sample

One sample statistics			N	Mean	Stand. Dev.	Standard Error Mean
High Season	Total Servqual score		400	-.1700	.4450	.0220
Low Season	Total Servqual score		397	-.1200	.3770	019.
High Season	Servqual score for the Reliability Dimension		395	-.4330	.7257	.0365
	Servqual score for the Responsiveness Dimension		397	-.2399	.4580	.0229
	Servqual score for the Assurance Dimension		396	.1086	.5438	.0273
	Servqual score for the Empathy Dimen sion		398	-.5408	.6195	.0310
	Servqual score for the Tangibles Dimension		397	.1587	.5000	.0250
Low Season	Servqual score for the Reliability Dimension		393	.0015	.6556	.0330
	Servqual score for the Responsiveness Dimension		392	-.2022	.3417	.0172
	Servqual score for the Assurance Dimension		394	.1390	.4245	.0213
	Servqual score for the Empathy Dimension		397	-.4691	.5428	.0272
	Servqual score for the Tangibles Dimension		386	-.0848	.5220	.0265

One sample test		Test value = 0					
						95% confidence interval for difference	
		T	df	Sig. (2-way)	Means difference	Lower	Upper
High Season	Total Servqual score	-7.640	399	.000	-,.7000	-.2100	-.1300
Low Season	Total Servqual score	-6.473	396	.000	-.1220	-.1600	-.0900
High Season	Servqual score for the Reliability Dimension	-9.401	394	.000	-.3432	-.4151	-.2715
	Servqual score for the Responsiveness Dimension	-10.437	396	.000	-.2399	-.2851	-.1947
	Servqual score for the Assurance Dimension	**3.973**	**395**	**.000**	**.1085**	**.0549**	**.1623**
	Servqual score for the Empathy Dimension	-17.414	397	.000	-.5408	-.6019	-.4798
	Servqual score for the Tangibles Dimension	**6.324**	**396**	**.000**	**.1586**	**.1094**	**.2080**
Low Season	Servqual score for the Reliability Dimension	.046	392	.963	.0015	-.0635	.0666
	Servqual score for the Responsiveness Dimension	-11.713	391	.000	-.2021	-.2361	-.1682
	Servqual score for the Assurance Dimension	**6.497**	**393**	**.000**	**.1389**	**.0969**	**.1810**
	Servqual score for the Empathy Dimension	-17.220	396	.000	-.4691	-.5227	-.4156
	Servqual score for the Tangibles Dimension	-3.193	385	.002	-.0848	-.1371	-.0326

Source: Based on data collected by the author.

Table 8: Total and percentage distribution of users by Servqual Score According to Tourism Season and Servqual Scale Dimension

Dimensions and tourism season		High Season	Low Season	Total
Servqual score for the Reliability Dimension (grouped)	less than -2.00	8	1	9
		2.0%	.3%	1.1%
	from -2.00 to -1.20	37	20	57
		9.4%	5.1%	7.2%
	from -1,20 to -0.40	132	84	216
		33.4%	21.4%	27.4%
	from -0.40 to 0.40	160	175	335
		40.5%	44.5%	42.5%
	greater than 0.40	58	113	171
		14.7%	28.8%	21.7%
Total		**395**	**393**	**788**
		100.0%	100.0%	100.0%
Servqual score for the Responsiveness Dimension (grouped)	from -2.00 to -1.31	8	0	8
		2.0%	0%	1.0%
	from -1.31 to -0.62	57	43	100
		14.4%	11.0%	12.7%
	from -0.62 to 0.6	254	305	559
		64.0%	77.8%	70.8%
	greater than 0.6	78	44	122
		19.6%	11.2%	15.5%
Total		**397**	**392**	**789**
		100.0%	100.0%	100.0%
Servqual score for the Assurance Dimension (grouped)	from -2.00 to -1.19	12	1	13
		3.0%	.3%	1.6%
	from -1.19 to – 0.37	56	45	101
		14.1%	11.4%	12.8%
	from-0.37 to 0.44	181	210	391
		45.7%	53.3%	49.5%
	greater than 0.044	147	138	285
		37.1%	35.0%	36.1%
	Total	**396**	**394**	**790**
		100.0%	100.0%	100.0%
Servqual score for the Tangibles Dimension (grouped)	less than -2.00	0	1	1
		0%	.3%	.1%
	from -2.00 to -1.19	5	11	16
		1.3%	2.8%	2.0%
	from -1.19 to -0.37	42	76	118
		10.6%	19.7%	15.1%
	from -0.37 to 0.44	238	257	495
		59.9%	66.6%	63.2%
	Greater than 0.44	112	41	153
		28.2%	10.6%	19.5%
	Total	**397**	**386**	**783**
		100.0%	100.0%	100.0%

Source: Based on data collected by the author.

The statistical tests performed, which reveal differences between expectations and perceptions, allow us to reject Hypothesis 1, concerning equality of expectations and perceptions. The test results point to acceptance of the alternate hypothesis, namely, that differences exist between users' expectations and perceptions with respect to service quality and that their expectations are higher than their perceptions. As a result, a shortfall in service quality is deemed to exist.

In order to establish which tourism season produced the highest Servqual scores (Table 8), the confidence intervals which estimate the level of score differences (Table 7) were examined closely. The examination allows us to infer that, with 95% confidence, the reliability dimension in high season produces more negative or least favourable scores, i.e. the Servqual score in low season is higher than in high season. On the other hand, the tangibles dimension in high season presents a more positive Servqual score than in low season.

Hypothesis 2: Independent variables: income level, education, sex, and age of users affect the value reached by those discrepancies between customer expectations and perceptions during high and low tourism seasons.

Factorial Analysis of Variance for Servqual Scores. In order to o detect discrepancies in the Servqual scores between different user groups (Table 9), a factorial ANOVA[3] was carried out for each of the two tourism seasons.

As the ANOVA shows, the critical level of statistic F ($p = 0 < 0.05$) indicates that the model explains a significant portion of the variation seen in the Servqual scores (independent variable), for both the high and low seasons. Specifically, the model indicates that a discrepancy exists only between the average Servqual score in user groups with different levels of earnings and education, and the average of that score is similar among those users grouped according to their age and sex. It indicates also that there is no interaction effect between the independent variables, given that the critical value of the test statistic is greater than 0.05 (Table 10).

[3] According to Pardo and Ruiz (2002), factorial ANOVAs evaluate the individual and combined effect of two or more factors (categorical independent variables) on a quantitative dependent variable.

In order to identify which group of independent variables (user education and earnings) produced the highest scores, an ad hoc comparison was performed as part of the ANOVA and a profile chart generated. This revealed that, in order of importance, users with a university or higher technical education level presented the highest Servqual scores, followed by those with basic or secondary education and, thirdly, users with postgraduate studies (Table 11).

Table 9: Categorized Independent Variables of the ANOVA

	Value Label
Gender	Male
	Female
Age (grouped)	35 or below
	Over 35
Level of education (grouped)	Basic or secondary education
	University or higher technical education
	Postgraduate university education
Level of monthly earnings (grouped)	Less than Bs. 2000.00
	More than Bs. 2000,00

Source: Based on data collected by the author. Bs: Bolivar, Venezuelan currency.

Table 10: Factorial ANOVA for Mean Servqual Scores
Inter-subject effect tests. Dependent variable: Total Servqual Score

High Season / Source	Type III sum of squares	df	Quadratic mean	F	Sig.
Adjusted model	20.630(a)	23	.897	5.821	.000
Intersection	4.366	1	4.366	28.335	.000
Gender	.062	1	.062	.402	.527
Agegrouped	.209	1	.209	1.359	.244
Educgrouped	**10.929**	**2**	**5.464**	**35.464**	**.000**
Earningsgrouped	**5.779**	**1**	**5.779**	**37.503**	**.000**
gender * agegrouped	.145	1	.145	.943	.332
gender * educgrouped	.015	2	.008	.050	.951
agegrouped * educgrouped	.224	2	.112	.728	.483
gender * agegrouped * educgrouped	.087	2	.044	.284	.753
gender * earningsgrouped	.024	1	.024	.155	.694
agegrouped * earningsgrouped	.070	1	.070	.453	.501
gender * agegrouped * earningsgrouped	.065	1	.065	.420	.517
educgrouped * earningsgrouped	.469	2	.235	1.522	.220
gender * educgrouped * earningsgrouped	.890	2	.445	2.888	.057
agegrouped * educgrouped * earnings-grouped	.119	2	.059	.386	.680
gender * agegrouped * educgrouped * earningsgrouped	.284	2	.142	.921	.399
Error	56.087	364	.154		
Total	87.211	388			
Adjusted total	76.717	387			
a R squared = .269 (Adjusted R squared = .223)					
Low Season / Source:					
Adjusted model	19.163(a)	16	1.198	12.199	.000
Intersection	.097	1	.097	.993	.320
Gender	.009	1	.009	.090	.764
Agegrouped	.001	1	.001	.007	.932
Educgrouped	**1.284**	**2**	**.642**	**6.541**	**.002**
Earningsgrouped	**.387**	**1**	**.387**	**3.942**	**.048**
gender * agegrouped	.055	1	.055	.564	.453
gender * educgrouped	.065	2	.033	.333	.717
agegrouped * educgrouped	.098	1	.098	1.002	.318
gender * agegrouped * educgrouped	.001	1	.001	.015	.902
gender * earningsgrouped	.039	1	.039	.394	.530
agegrouped * earningsgrouped	.136	1	.136	1.385	.240
gender * agegrouped * earningsgrouped	.000	1	.000	.003	.956
educgrouped * earningsgrouped	.070	1	.070	.713	.399
gender * educgrouped * earningsgrouped	.014	1	.014	.147	.701
agegrouped * educgrouped * earnings-grouped	.016	1	.016	.165	.685
gender * agegrouped * educgrouped * earningsgrouped	.000	0	.	.	.
Error	37.015	377	.098		
Total	62.067	394			
Adjusted total	56.177	393			
a R squared = .341 (Adjusted R squared = .313)					

Source: Compiled by author.

Regarding the behaviour of the Servqual scores among users with different earnings levels, the average scores in both seasons are seen to be lower for the group earning less than Bs. 2,000.00 compared to that earning more than Bs. 2,000.00. This behaviour is similar in the user groups regardless of their educational backgrounds, as indicated by the lack of interaction between the variables (Figure 5).

Thus, it can be inferred that hypothesis 2 concerning the influence of the variables (tourists' earnings and education) on the discrepancies observed between expectations and perceptions is fulfilled.

Conclusions and Recomendations

In the first part of the analysis presented here, the Servqual scale methodology was used to measure service quality in terms of the discrepancies between the expectations and perceptions of users (user gap) with respect to tourism accommodation in Mérida State (specific objective 1). The measurement allows us to infer a service quality shortfall given that expectations exceed perceptions.

Table 11: Post Hoc Test. Multiple comparisons. Dependent variable: Total Servqual score

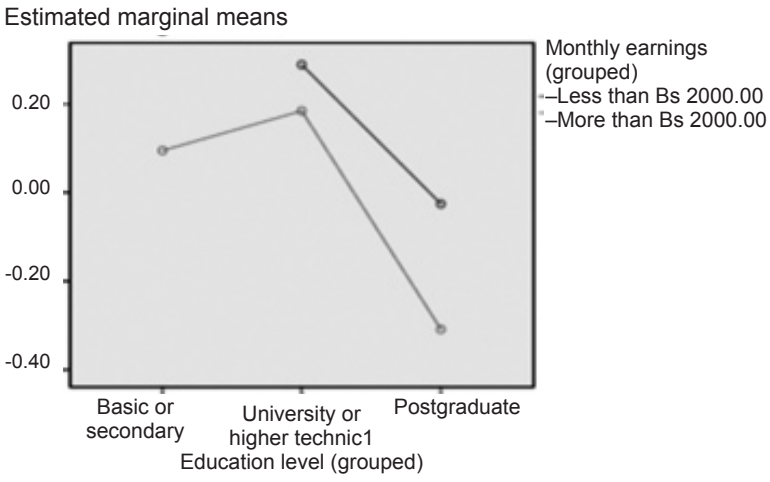
High Season:	(I) Education (grouped)	(J) Education (grouped)	Difference between means (I-J)	Standard dev.	Significance	95% Confidence Interval	
			Lower Limit	Upper limit	Lower limit	Upper limit	Lower limit
Tukey HSD	Basic or secondary education	University or higher technical education	-.1024	.0538	.140	-.2292	.0244
		Postgraduate university education	.2886(*)	.0492	.000	.1728	.4044
	University or higher technical education	Basic or secondary education	.1024	.0538	.140	-.0244	.2292
		Postgraduate university education	.3911(*)	.0473	.000	.2796	.5025
	Postgraduate university education	Basic or secondary education	-.2886(*)	.0492	.000	-.4044	-.1728
		University or higher technical education	-.3911(*)	.0473	.000	-.5025	-.2796
Games-Howell	Basic or secondary education	University or higher technical education	-.1024	.0574	.178	-.2380	.0332
		Postgraduate university education	.2886(*)	.0534	.000	.1625	.4148
	University or higher technical education	Basic or secondary education	.1024	.0574	.178	-.0332	.2380
		Postgraduate university education	.3911(*)	.0480	.000	.2777	.5044
	Postgraduate university education	Basic or secondary education	-.2886(*)	.0534	.000	-.4148	-.1625
		University or higher technical education	-.3911(*)	.0480	.000	-.5044	-.2777
Low Season	(I) Education (grouped)	(J) Education (grouped)	Difference between means (I-J)	Standard dev.	Significance	95% Confidence Interval	
			Lower limit	Upper limit	Lower limit	Upper limit	Lower limit
Tukey HSD	Basic or secondary education	University or higher technical education	-.0093	.1074	.996	-.2621	.2434
		Postgraduate university education	.3811(*)	.1064	.001	.1306	.6316
	University or higher technical education	Basic or secondary education	.0093	.1074	.996	-.2434	.2621
		Postgraduate university education	.3904(*)	.0325	.000	.3139	.4670
	Postgraduate university education	Basic or secondary education	-.3811(*)	.1064	.001	-.6316	-.1306
		University or higher technical education	-.3904(*)	.0325	.000	-.4670	-.3139
Games-Howell	Basic or secondary education	University or higher technical education	-.0093	.0548	.984	-.1545	.1359
		Postgraduate university education	.3811(*)	.0536	.000	.2376	.5246
	University or higher technical education	Basic or secondary education	.0093	.0548	.984	-.1359	.1545
		Postgraduate university education	.3904(*)	.0337	.000	.3111	.4697
	Postgraduate university education	Basic or secondary education	-.3811(*)	.0536	.000	-.5246	-.2376
		University or higher technical education	-.3904(*)	.0337	.000	-.4697	-.3111

Note. Compiled by author. (*) Significant for $p = 0 \leq 0.05$.

Figure 5. Average Servqual scores by Education and Earnings for High and Low Seasons.

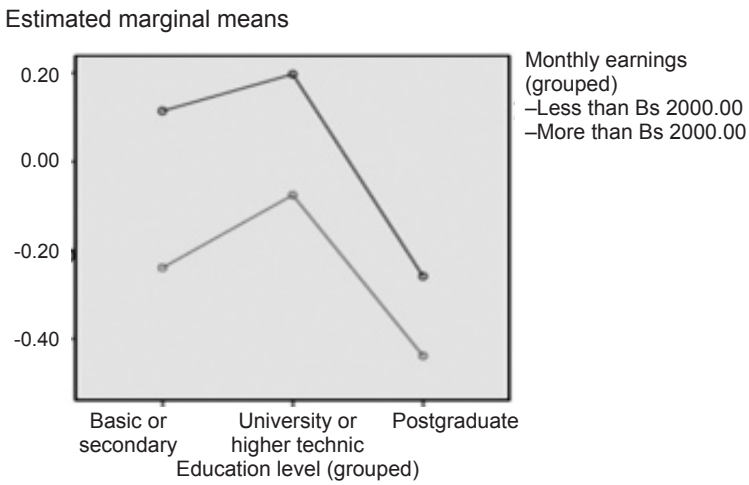
Low Season

Estimated marginal means of total Servqual score



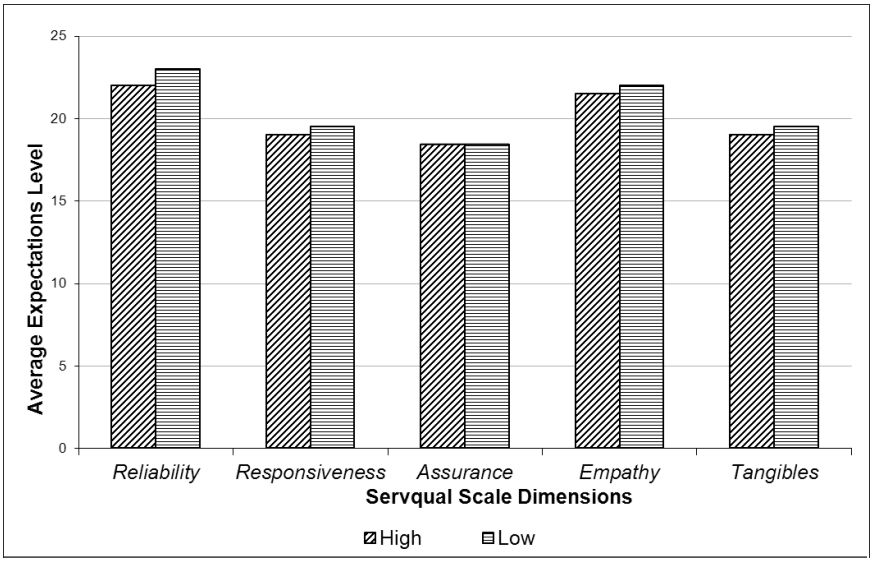
High Season

Estimated marginal means of total Servqual score



Source: Based on data collected by author.

Figure 6. Average Expectations in High and Low Tourism Seasons.



Source: Based on data collected by author.

Measurement was carried out in several ways: using the Servqual scale as a Likert scale; calculating the total Servqual score; and the Servqual score for the service dimensions. Hypothesis tests (based on the Student t-statistic test) show that users' expectations exceed their perceptions in both tourist seasons.

A factorial ANOVA was used to study the behaviour of the Servqual scores in conjunction with other factors (independent variables) such as the characteristics of the service users. In addition, as part of the factorial ANOVA, inter-subject effects tests and future comparisons (post hoc) were performed. This analysis allowed analyzing the impact of variables such as income level, education, sex and age of users (independent variables) at the expectations and perceptions level of the same or Servqual scores (dependent variable). Specifically, it was demonstrated that different age and sex users have similar levels of Servqual scores; differences in average Servqual scores were found to exist only among the user groups defined by their level of education and earnings (objective 2): the most highly educated (postgraduate university studies) and highest-earning users present the lowest Servqual scores, given that their expectations are higher

than their perceptions of the service received. In brief, education and income level of users do have an effect on the service quality levels evaluated by users.

With a view to the recommendations, and according to the stated-hypotheses testing, a shortfall in the service quality in tourist accommodation was found, especially as for responsibility and reliability during high seasons, thus it is suggested: the courtesy, promptness, concern, clarity, honesty, flexibility and adaptation to user requirements and a willingness to explain, inform and to compensate failure fairly through a combination of forms.

These practices should be applied effectively, especially towards those users with a higher income and education level, since these variables influence quality levels experienced by users.

In order to improve empathy (individualized attention, awareness of needs and having customers' best interests at heart), it is essential to have some knowledge about the customer expectations and needs, through marketing research, service recovery, upward communication, and user retention.

In terms of recommendations for better knowledge of *user expectations and perceptions*, the following are suggested:

- Market research should be carried out through brief user surveys such as comment cards and post-transaction questionnaires (by telephone or by post) to identify the most important service characteristics for users, to gauge their satisfaction with the service and their intentions to return, and to obtain information on what the user thinks can and should be done to remedy failures and with respect to employee performance. Other ways of conducting market research include the critical incident and mystery user methods, user observation, recording user information (place of origin, reason for travel, services requested, length of stay, activities undertaken and other habits observed).
- Recover service by encouraging user complaints, through customer satisfaction questionnaires, the critical incident technique and suggestion boxes (market research strategy techniques).

- A further and inexpensive way to recover service is to detect failures before they arise, by keeping and analysing claims or complaints, classifying failures, identifying key points in the service delivery process in order to reformulate processes and policies, and plan alternatives, compensation and staff training. These strategies should be implemented even in establishments where failure is rare.

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