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DIMENSIONS OF QUALITY IN SERVICES PROVIDED BY LANGUAGE SCHOOLS

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ABSTRACT

The purpose of this article is to present a possible set of attributes and dimensions that make up the quality of services in language schools. The proposed scale for measuring quality in this type of service was based on the SERVQUAL instrument. It aims to contribute to the advancement of the discussions on the necessary adjustments to the SERVQUAL Instrument to evaluate quality aspects related to the most varied types of services. To achieve these objectives, a survey was conducted with 97 students from a language school, located in the city of São Bernardo do Campo (SP), which has a total of 120 enrolled students. Through exploratory factorial analisys we reached the following dimensions: 1) customer care, regarding the way teachers and staff of the language school treat the clients (students); 2) teaching level and environment, regarding teaching quality with favorable environment to study and accessibility to the referred dimension, existence of trained professionals and recognition by the community of the quality of teaching used in the school; and 3) physical facilities, referring to the quality and appearance of the physical facilities and equipment of the language school. The evaluation of the quality of services offered by the researched school has brought evidence that it has met the expectations of its consumers regarding the dimension customer care. On the other hand, the perception of its clients regarding the teaching level and environment and the physical facilities has not been positive.

Keywords: Quality dimensions in services. Language shcool, SERCQUAL instrument.

1. INTRODUCTION

Providing services that meet the needs and expectations of customers has been the central concern of the companies nowaday. This is because the quality of the service provided to the customer is increasingly becoming one of the main ways for a company to differentiate itself in the market, especially in those in which competitors offer similar products and services.

This importance of services in the competitiveness of companies has characterized the need to carry out empirical and conceptual studies on the measurement of quality in services. Works such as Ramseook-Munhurrun, Naidoo and Lukea-Bhiwajee (2009); Branco, Ribeiro and Tinoco (2010) and Cauchick Miguel et Salomi (2004) demonstrate this need, and many researchers have been working on the development of models, techniques and scales for the measurement of quality in services.

The SERVQUAL instrument (Parasuraman Zeithaml et Berry, 1988) is one of the techniques developed for this purpose that is most used and referenced in the literature. It consists of a questionnaire composed of 22 items distributed in five dimensions of quality for services. Although initially proposed by its creators as usable in quality evaluation for any service, the discussion that still in the literature is about the need to adapt the SERVQUAL scale to the specificities of each type of service (Freitas, Bolsanello and Viana, 2008; Renganathan, 2011; Zekiri, 2011; Gonçalves et Belderrain, 2012).

In this sense, the purpose of this article is to present a possible set of attributes and dimensions that make up the quality of services in language schools, based on the SERVQUAL instrument.

In addition to contributing to the discussions on possible adaptations to the SERVQUAL scale, the importance of

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evaluating the service provided by the language schools is also highlighted in the justification of this work. They are increasingly present in the list of service activities being offered in our society to meet a growing demand of professionals working in the most diverse sectors. Fluency in another language, especially in English, is no longer a differential, but an essential requirement demanded by most of the large companies that operate in globalized businesses. It is a pulverized market, and facing high demand and growing supply of language schools it is deemed necessary to have instruments to measure the quality of service provided by these companies.

To this end, this article is structured as follows: sections 2 and 3 presents, respectively, the concept of quality in services and the SERVQUAL Instrument; section 4 describes the methodology used in this work; section 5 presents the results obtained from the exploratory factorial analysis carried out to identify quality dimensions in services for the case of the researched language school and also presents the critical items and the suggestions for actions to improve them; and finally, section 6 presents the final considerations of this work.

2. QUALITY IN SERVICES

As stated by Freitas, Bolsanello and Viana (2008), quality in services is a topic that is much discussed and questioned, both in the literature and in the business environment, since it involves the not so simple understanding of two concepts: quality and service.

In relation to the term service, several authors, such as Parasuraman Zeithaml et Berry (1985), Urdan (1993) and Grönroos (1995), have presented what their specificities would be. According to these authors, every service activity is characterized by being intangible, produced and consumed simultaneously and having the client as the element that triggers the order for its execution process. Another important feature of service activities is its variability. Services are highly variable or heterogeneous because their performance varies from supplier to supplier, from customer to customer and from one day to the next (Parasuraman Zeithaml *et* Berry, 1985).

Regarding the term quality, we can define service quality (perceived quality) as the ability that the service processes experienced by customers has to meet their needs, solve problems and provide benefits to them (Albrecht *et* Bradford, 1992).

According Grönroos (1984), perceived quality can be subdivided in technical and functional quality. The technical quality refers to the result of the process of provision of service, to what the customer receives when acquiring the service. In turn, the functional quality refers to the performance of the process of provision of service experienced by the client. Thus, the client does not evaluate only the final result of the service, but its entire provision process. The evaluation of the quality of service by the customer happens, therefore, in each moment of his contact with the company providing the service and also after its termination.

In the course of the process of provision of service, the client will evaluate the quality of the service provided based on some quality criteria/attributes. However, each moment that composes this process has a different nature, and consequently, the attributes of quality in services will also be different that will be used by the client in the evaluation of each of these moments.

Several authors have discussed the attributes of quality in service in an attempt to explain the client's evaluation process. Among them, we can mention: Parasuraman, Zeithaml and Berry (1985); Carman (1990); Garvin (1993); Freeman et Dart (1993); Chowdhary et Prakash (2007); Eberle, Milan and Lazzari (2010); and Ganguli et Roy (2010). In fact, there is no consensus in the literature about the number of attributes that make up quality in services. Thus, each company must define, according to its particularities and based on the market, its set of attributes of the perceived quality to be analyzed and the importance of each attribute considered in the evaluation process (Chowdhary *et* Prakash, 2007).

Specifically in relation to language schools, there are few jobs developed for this purpose. We can mention here the ones of: Bernardi et al. (2012); Freitas, Batista and Almeida (2012); and Mello et al. (2002). The first authors present the following dimensions: school (attributes related to customer care received at school, accessibility and physical facilities); Teachers (attributes related to teacher qualification), course (attributes related to pedagogical proposal) and environment (location and parking). Freitas, Batista and Almeida (2012) present analysis items related to customer care (courtesy of employees and teachers, etc.), classroom (comfort, room size etc.), teaching (teacher qualification, quality of courseware, way of conducting classes, etc.), infrastructure (existence of canteen, teaching laboratories, etc.) and price. Finally, Mello et al. (2002) analyzed the same dimensions given by Parasuraman, Zeithaml and Berry (1985) for the analysis of any service: tangibility, reliability, empathy, readiness (promptness) and guarantee (security). The only distinction made by the authors is the analysis of the dimensions readiness and guarantee separately for teachers and staff.

In order to measure quality in services, there are several possible techniques. In Johnston et Clark (2002), Cauchick

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Miguel et Salomi (2004) and Salomi, Cauchick Miguel and Abackerli (2005), some of these techniques are presented. Their discussion, however, would escape the scope of this work, which focuses on identifying possible attributes and dimensions that make up the quality of services in language schools, based on the SERVQUAL instrument. Thus, in the following section, a brief presentation of this instrument is made.

3. SERVQUAL INSTRUMENT

Based on Oliver's (1980) model of satisfaction, Parasuraman, Zeithaml and Berry (1980) proposed a model for service quality measurement in which it is a function of the discrepancy between the customer's expectation and his judgment of the service rendered . Thus, the evaluation of the quality Qi of a service performed by a given customer is calculated by difference (Gap) between its expectation (Ei) and its perception about the performance of the service Di, in relation to a certain aspect (i) of the quality in service. Equation 1 illustrates this concept of evaluation:

$$Q_i = D_i - E_i \quad (1)$$

Where:

- Q_i = quality of service in relation to characteristic *i* of service;
- D_i = performance of the service, from the perspective of the client (perception), in relation to the characteristic *i* of the service;
- E_i = the customer's expectation in relation of the characteristic *i* of service.

Considering that the quality of service is composed of multifaceted dimensions, the evaluation of the quality of the service as a whole would be the result of the joint evaluation of the discrepancies between expectation and performance of the several characteristics analyzed from the perspective of the clients (Gonçalves *et* Belderrain, 2012).

The model for the measurement of quality in services proposed by Parasuraman, Zeithaml and Berry (1985), the *Gaps* Model, also shows the influences of other discrepancies (*Gaps*) occurred in the quality of the services that cause this difference between the expectation and customer perception regarding the service. They are: difference between user expectations and managerial perception (*Gap 1*); Difference between the managerial perception of the users' expectations and the specifications of the service quality (*Gap 2*); Difference between the specifications of the quality of service and the provision of the service (*Gap 3*); And the difference between the perception of the service and external communications with the user (*Gap 4*). The last Gap considered in the model, therefore, would be the difference between the expected service and the perceived service (*Gap 5*), being this *Gap* a function of previous *Gaps* (Gonçalves *et* Belderrain, 2012).

As discussed by Salomi, Cauchick Miguel, and Abackerli (2005), another important conclusion from the surveys carried out by the authors of the model was that, when addressing a wide set of different service processes, it was observed that customers used practically the same attributes to evaluate the quality of the service provided, irrespective of the service in question. These attributes could be generalized in five dimensions of quality in services.

From the model for measuring quality in services and the five dimensions of quality in services identified by the authors, Parasuraman, Zeithaml and Berry (1988) developed the SERVQUAL instrument.

The SERVQUAL instrument consists of a questionnaire composed of 22 items distributed in five dimensions of quality for services, as described below (Cauchick Miguel *et* Salomi, 2004):

1. Reliability – ability to perform a service reliably and accurately and that conforms to previous experience;
2. Promptness – responsiveness, personalization and courtesy in customer care;
3. Security – competence, courtesy and ability of employees to convey safety/credibility;
4. Empathy – specialized attention to customers and easy contact (accessibility) and communication with customers;
5. Tangibles – the appearance of all that is visible to the customer: physical facilities, equipment, staff and communication materials.

The SERVQUAL instrument has two columns related to the 22 items of analysis: one referring to the expectations of the client and another one related to the perception of the client regarding the service provided. Both are evaluated by a *Likert* type scale with seven points, being "1" equivalent to "strongly disagree"; and "7," to "strongly agree." The difference (*Gap*) between the average response obtained for the expectation and perception is resulting in the quality of each item analyzed from the perspective of the customer (Cauchick Miguel *et* Salomi, 2004).

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A negative *Gap* indicates that perceptions are below expectations, identifying service failures that generate an inadequate outcome for the client. A positive *Gap* indicates that the service provider is offering a higher-than-expected service, being a point of suitability of the service for the client. Therefore, the SERVQUAL instrument allows to evaluate the quality of the service based on the opinion of its clients.

As already explained in the introduction of this article, in spite of its advantages, the SERVQUAL instrument, like any other product, can and should be improved in the construction of its evolutionary process. This has led to studies aimed at the development of multiple scales that adequately capture the context of particular studies, as proposed in this work.

4. RESEARCH METHOD

The present work is exploratory and descriptive in nature and used, in order to reach its objectives, the survey approach. That is, methodologically (Cauchick Miguel, 2007), this work can be understood as:

- Regarding the nature of the variables studied – quantitative;
- Regarding the nature of the relationship between the variables – descriptive character;
- Regarding the objective – Of exploratory nature, since it does not aim to prove which are the attributes and dimensions that make up the quality of services in language schools, but to explore new possibilities within the analyzed context;
- Regarding the intensity of control able to be exerted on the variables under study – experimental of field;
- Regarding the scope of the research, in terms of depth and breadth – sample surveys. "A survey comprises a survey of data in a significant sample about a problem to be studied and then, through quantitative analysis, obtain the conclusions corresponding to the data collected" (Gil, 1996 *apud* Cauchick Miguel, 2007, p. 219). In general, in surveys, a universe of tens, hundreds or thousands of elements is used.

Firstly, interviews with industry experts and clients, as well as the analysis of academic work on the subject (cited above), were carried out for the composition of a research instrument adapted to the specificities of language schools. Based on the established conversations, the material analyzed and the items present in the SERVQUAL scale proposed by Parasuraman, Zeithaml et Berry (1985), the research instrument was developed. In total, it has been proposed 17 items (attributes).

Each item was developed in the form of two statements: one with reference to the expectation (E) of the service; and the other, to the perception/performance (D) of the quality of the company in question, according to the SERVQUAL instrument. A Likert scale was adopted with five points, with "1" being equivalent to "totally disagreeing"; and "5", to "totally agree".

We chose to use a Likert scale with five points, instead of seven, because it is believed that the first one is easier to interpret by the respondents. This same scale adjustment was performed, for example, in the works of Dalazana Ferreira et Talamini (2007), Freitas, Bosanello and Viana (2008) and Gonçalves et Belderrain (2012).

After the development of the research instrument and the conduction of a pilot test (still aiming at the improvement of the instrument), the sample survey was carried out with the clients of the school used as a practical source of investigation. It should be noted that a case study was not done with the selected language school, but rather a survey with its clients. Thus, the school in question is the sample unit; And its students, the sample elements.

The language school selected for the study, located in the city of São Bernardo do Campo, has eight teachers and three administrative staff, and currently serves 120 students. The courses offered by the school are English and Spanish, from basic to advanced level. There are also differentiated courses such as: conversation, TOEFL preparation, executive English and training for exchange.

This school was chosen as a practical unit of research due to the willingness and great interest of its administrators, demonstrated during the initial interviews, and by measuring the quality perceived by its students in relation to the service provided.

To maximize the feedback of the information with the completed questionnaires, a training was first applied to the teachers and the employees involved in this project, enabling them to explain or answer questions of the students. In this training, the objectives of each questionnaire were exposed, emphasizing that the first refers to the student's expectation of any language school in the market and the second, to the performance of said school, from the point of view of the student. It was also explained to the students the importance of the application of this instrument to evaluate the services provided by the language school and the need, therefore, to have a considerable time of a class for that purpose.

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The applications of the questionnaires occurred during four weeks, being made available a period of 30 minutes in each class for its completion. The survey was applied to a sample of 97 students (out of 120).

The performance of this survey allowed, first, the multivariate analysis of data. To identify the dimensions of the quality of the service under study, the exploratory factorial analysis was implemented to identify the basic dimensions related to the data and to reduce the number of analysis dimensions (Hair, Anderson and Tatham, 1998). This was followed by the factorial analysis presented in Figueiredo Filho et Silva Júnior (2010). Then, to measure the reliability of measurements and the internal consistency of the data, we used the Cronbach Alpha coefficient.

The coefficient α is calculated from the variance of the individual items and the variance of the sum of the items of each evaluator of all the items of a questionnaire that use the same measurement scale, according to the following equation (Hora, Monteiro e Arica, 2010):

$$\alpha = \left[\frac{k}{k-1}\right]\left[1 - \frac{\sum_{i=1}^{k} S_i^2}{S_t^2}\right], \quad (2)$$

Where:

S_i^2 is the variance of the item *i*,

S_t^2 is the variance of the sum of the observed items or the total variance of the questionnaire,

K is the number of questions or items of the questionnaire.

The Cronbach's Alpha value varies between 0 and 1. Although this coefficient is widely used to measure the reliability of an instrument (Hora, Monteiro and Arica, 2010), there is still no consensus in the literature about the interpretation of its values. Freitas et Rodrigues (2005) suggest the reliability classification of a given questionnaire based on the Cronbach Alpha coefficient, according to the limits presented in Table 1.

As stated by Hair, Anderson and Tatham (1998), the α values between 0.60 and 0.70 may be acceptable for exploratory researches.

The second analysis carried out by the survey was the identification of the most critical items in the services provided by the researched school, according to the perception of its clients, and, consequently, the identification of opportunities for improvement. For this, a matrix was constructed that presents the joint analysis of the importance of the items for the customers (average expectation) and the quality level (average Gap) observed in relation to the items, and the quartis analysis was also carried out (Freitas, Manhães and Cozendey, 2006), as presented in the following section.

5. RESULTS

The surveyed data were tabulated and the descriptive and multivariate analyzes were performed using Excel and SPSS software.

Before any data processing, there were missings, and in these cases, the missing values were replaced by the average value of the variable referring to the other respondents, as recommended by Hair, Anderson and Tatham (1998).

In order to identify the dimensions of the quality of the service under study, was implemented the factorial analysis - based on the data regarding the perception of the clients (students) regarding the performance of the service provided by the language school.

Firstly, the correlation pattern between the studied variables was evaluated. As can be seen in Table 2, most correlations exceed 0.30, indicating, according to Hair, Anderson and Tatham (1998), that the data are adequate for the use of factorial analysis.

KMO (Kaiser-Meyer-Olkin) and BTS (Bartlett Test of Spherecity) tests were also carried out to verify suitability of the sample. The results obtained (KMO equal to 0.841, BTS equal to 820,500 and degree of significance of 0.00) demonstrate that the factorial analysis is a technique adequate to the present study (KMO ranging from 0 to 1, having a value of 0.50 as a minimum threshold of adequacy,

Table 1 - Reliability classification from the Cronbach Alpha coefficient

Reliability	Too low	Low	Moderate	High	Very high
Value of α	α ≤ 0,30	0,30 < α ≤ 0,60	0,60 < α ≤ 0,75	0,75 < α ≤ 0,90	α > 0,90

Source: Freitas *et* Rodrigues (2005, p. 4)

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Table 2 - Correlation matrix

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17
P1	1,000																
P2	,484	1,000															
P3	,390	,455	1,000														
P4	,363	,253	,266	1,000													
P5	,365	,278	,451	,529	1,000												
P6	,112	,168	,173	,411	,561	1,000											
P7	,342	,175	,324	,537	,543	,510	1,000										
P8	,320	,441	,485	,434	,524	,428	,534	1,000									
P9	,403	,312	,262	,485	,637	,516	,554	,539	1,000								
P10	,236	,383	,205	,303	,263	,227	,310	,304	,406	1,000							
P11	,311	,188	,355	,407	,389	,395	,493	,368	,296	,287	1,000						
P12	,438	,325	,346	,334	,383	,419	,432	,479	,484	,364	,589	1,000					
P13	,241	,316	,301	,484	,656	,452	,509	,428	,609	,284	,328	,522	1,000				
P14	,411	,428	,385	,291	,422	,424	,393	,461	,439	,544	,475	,454	,342	1,000			
P15	,391	,294	,438	,355	,463	,381	,373	,412	,440	,375	,467	,481	,305	,646	1,000		
P16	,432	,330	,340	,364	,514	,425	,406	,479	,482	,385	,546	,452	,329	,675	,722	1,000	
P17	,202	,331	,068	,066	-,103	-,027	-,051	,146	-,128	,099	,012	-,036	-,088	,170	,005	,118	1,000

and BTS, statistically significant, p <0.05) (Hair, Anderson and Tatham, 1998).

Then, the number of factors to be extracted was determined. For this, the eigenvalue was equal to or greater than 1, and three factors were obtained that explain 60.079% of the variance of the original data. This value is precisely at the threshold limit suggested by Hair, Anderson and Tatham (1998) (patamar de 60%).

Table 3 presents the commonalities associated with each variable. The commonalities are indices that express how much of the variance of each variable is explained by the factorial analysis. The closer to 1 are the commonalities, the better the adjustment of the factorial analysis, the minimum value usually acceptable being 0.5 (Hair, Anderson and Tatham, 1998). Thus, as can be observed in Table 3, variables P3 and P10 had to be taken from the set of variables under study. After removing these variables, the factorial analysis was performed again, and the new matrix generated did not present variables with commonalities below 0.5.

After the removal of the problematic variable according to the degree of commonality, we analyzed the factorial loadings of each variable in relation to the factors extracted. Table 4 shows these values after rotation (Varimax rotation).

Table 3 - Commonalities*

	Initial	Extraction
P1	1,000	,504
P2	1,000	,715
P3	1,000	,422
P4	1,000	,515
P5	1,000	,702
P6	1,000	,534
P7	1,000	,600
P8	1,000	,577
P9	1,000	,660
P10	1,000	,361
P11	1,000	,556
P12	1,000	,516
P13	1,000	,669
P14	1,000	,734
P15	1,000	,711
P16	1,000	,737
P17	1,000	,529

*Extraction Method: Principal Component Analysis.

According to Hair, Anderson and Tatham (1998), the same variable can not contribute to the formation of two or more distinct factors, with the acceptable limit being the load value 0.4. If a variable presents a factorial load above this value in more than one factor, it must be eliminated from the analysis. Thus, the variable P12 was removed from the analyzed group, and the factorial analysis was performed again. After these debugging, no problems of

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commonality and factorial loads were observed regarding the remaining variables.

Table 4 - Rotated matrix (Varimax)*

	Componentes		
	1	**2**	**3**
P1	,264	,311	,581
P2	,218	,172	,799
P3	323	,284	,487
P4	,669	,170	,196
P5	,783	,277	,108
P6	,616	,376	-,117
P7	,709	,311	4,073E-02
P8	,578	,294	,397
P9	,749	,297	,108
P10	,187	,501	,274
P11	,310	,678	7,712E-03
P12	**,450**	**,542**	**,140**
P13	,802	,124	,102
P14	,200	,774	,308
P15	,231	,799	,136
P16	,259	,797	,189
P17	-,233	6,106E-03	,689

*Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.

The values of KMO (*Kaiser-Meyer-Olkin*) and BTS (*Bartlett Test of Spherecity*) obtained for this new round of factorial analysis are shown in Table 5.

Table 5 - KMO Test and Bartlett Test of Spherecity

Sample adequacy test		**Measures**
KMO (Kaiser-Meyer-Olkin)		**0,879**
Bartlett Test of Spherecity	Approximate chi-square	637,021
	Freedom degree	91
	Meaningfulness	0,000

The three factors extracted now explain 63.725% of total variance, as shown in Table 6.

Table 7 shows the values of each component distributed in the three factors extracted after the rotation.

The Cronbach Alpha values for each of the extracted factors are also found in the table. These coefficients, as already explained in the previous section, were used to analyze the internal consistency of the data, referring to the degree to which the items surveyed are correlated with each other and with the overall result of the research (in each dimension), which indicates its reliability level.

Analyzing the results of the coefficients based on the classification given by Freitas et Rodrigues (2005), it is observed that the reliability of the data was moderate for the dimension "physical facilities" and high for the dimensions "customer care" and " teaching level and environment ". All these values of Cronbach's α were considered indicative of internal consistency because it is an exploratory study, as suggested by Hair, Anderson and Tatham (1998).

Following, a summary of each of the dimensions of quality in services found in this study:

- Customer care: This dimension refers to the form of treatment given to the client (students) by the staff and teachers of the language school - willingness to assist and help the client; Degree of courtesy from teachers and staff in contact with the client. This dimension resembles that of the same name described in Corrêa et Caon (2012), when presenting the dimensions of quality in services in general, and includes customer care items described in Freitas, Batista and Almeida (2012);

- Teaching level and environment: This dimension is related to the quality of teaching, the existence of an environment conducive to study and easy accessibility, with the existence of trained professionals and with the recognition by the community of the quality of teaching used in the school. This dimension is related in a certain degree to that entitled "teaching environment", presented by Eberle, Milan et Lazzari (2010), when identifying those that would be the dimensions of quality in services in a higher education institution. When compared to the dimensions

Table 6 - *Eigenvalues* and accumulated variance *

			Initial eigenvalues		*Extraction sums of squares loadings*	
Component	**Total**	**% variance**	**% accumulated**	**Total**	**% variance**	**% accumulated**
1	6,142	43,873	43,873	4,027	28,761	28,761
2	1,633	11,663	55,536	3,036	21,684	50,445
3	1,146	8,189	63,725	1,859	13,280	63,725

* Extraction Method: Principal Component Analysis.

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of quality in services in language schools presented in Bernardi et al. (2012) and in Freitas, Batista and Almeida (2012), the dimension in question merges attributes distributed in dimensions such as teacher and environment and teaching and infrastructure;

- Physical facilities: This dimension concerns the quality and appearance of the physical facilities and equipment of the language school. It is related to the "tangible" dimension proposed by Parasuraman, Zeithaml and Berry (1988) in the development of the SERVQUAL scale for the measurement of quality in services in general and used by Mello et al. (2002), when analyzing specifically the case of a language school.

After defining these dimensions of quality in services provided by language schools from the factorial analysis, the most critical items in the services provided by the researched school were surveyed. To this end, besides the respondents 'perception of the company's performance in relation to the items analyzed (the data base used to perform the factorial analysis described here), the respondents' expectations were also used in relation to the same items, according to the quality model presented by equation 1 (Q = D-E).

Keeping, naturally, the same grouping of the variables studied suggested by the factorial analysis applied to the perception data, we also calculated the coefficients $\alpha_{expectation}$ to analyze the internal consistency of the data of the questionnaire expectation.

The results of $\alpha_{expectation}$ are presented in conjunction with those of $\alpha_{performance}$ in Table 8.

Table 8 - Alpha de Cronbach (α) Value

Dimensions	$\alpha_{expectation}$	$\alpha_{performance}$
Customer care	0,791	0,880
Teaching level and environment	0,816	0,848
Physical facilities	0,622	0,601

Table 9 shows the average expected values (E), average performance (P) and the average Gap (P - E) for each dimension and evaluated criteria, calculated using Excel software.

As shown in the above table, all items analyzed have a degree of expectation very close to or above 4 points on the Likert scale of 5 points, with emphasis on: 8 - Teachers with fluency in the language and didactics (4,68); 2 - Confidence

Table 7 - Identification of factors*

Factor/Dimension	Attributes **	Components		
		Fator 1 (43,875%)	Fator 2 (11,663%)	Fator 3 (8,189%)
F1 – Customer care (Cronbach α = 0,880)	P4 – Solidarity and security in solving problems	0,683		
	P5 – Confidence transmitted by teachers	0,780		
	P6 – Service at scheduled times	0,616		
	P7 – Staff and teachers always available to help clients (students)	0,713		
	P8 – Personalized attention to customers (students)	0,587		
	P9 – Courteous staff	0,771		
	P13 – Courteous teachers	0,813		
F2 – Teaching level and environments (Cronbach α = 0,848)	P11 – Teachers with fluency in language and didactics		0,670	
	P14 – Good reputation in the market regarding quality teaching		0,756	
	P15 – Environment conducive to study (existence of teaching laboratories and comfortable classrooms)		0,823	
	P16 – Good location		0,825	
F3 – Physical facilities (Cronbach α = 0,601)	P1 – Modern equipment			0,585
	P2 – visually attractive physical facilities			0,777
	P17 – Own parking			0,757

*Extraction Method: Principal Component Anal

a Rotation converged in 4 iterations.

** From the set of attributes initially proposed, the following were excluded: (P3) Appearance of the facilities conserved according to the offered service; (P10) Convenient operating hours for all customers (students); and (P12) Teachers with experience abroad (English-speaking country).sis. Rotation Method: Varimax with Kaiser Normalization.

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transmitted by teachers (4.66); 10 - Environment conducive to study (existence of teaching laboratories and comfortable rooms) (4,49); 7 - Courteous teachers (4.43); And 4 - Staff and teachers always available to help clients (students) (4,42). These items belong to the dimensions "teaching level and environment" and "customer care". In turn, the items with lower expectations are: 5 - Personalized attention to customers (students) (3.98); 13 - Visually attractive physical facilities (3,9); And 14 - Own parking (3.83). It is noteworthy that two of the three items that make up the dimension "physical facilities" are among the least expected by customers.

In a general analysis of dimensions, it is observed that the dimension "teaching level and environment" obtained the highest average value in the expectation scale (4.41), followed by the dimension "customer care" (4.35). The "physical facilities" dimension obtained the lowest average (3.92).

In relation to the performance scale, the following items with higher evaluation were observed: 6 - Courteous staff (4.51); 2 - Confidence transmitted by teachers (4,49); 8 - Teachers with fluency in language and didactics (4,48); And 4 - Staff and teachers always available to help clients (students) (4.45). These items belong to the dimensions "customer care" and "teaching level and environment" and three of them (2, 4 and 8) are among those for which clients showed higher expectations.

On the other hand, the items that present the worst performances for the customers are: 14 - Own parking (1.98); 13 - Visually attractive physical facilities (3.5); 9 - Good reputation in the market for teaching quality (3.75); and 12 - Modern equipment (3,9). Only item 9 does not belong to the "physical facilities" dimension. It should also be noted that such unfavorable performance results referring to items 13 and 14 are not minimized by the fact that customer expectations for these items were also the lowest, since their numerical values were significant (above 3.8).

Also in a general analysis of the dimensions, it is observed that the "customer care" (4.39) obtained the highest average value in the perception scale, followed by the "teaching level and environment" (4,12). Again, the dimension "physical facilities" obtained the lowest average (3.13).

Continuing the analysis of the data presented in Table 2, the positive values of the average Gaps (D - E), as already explained, indicate satisfactory quality of service; and the negatives, unsatisfactory service quality. Note that, for most items, the Gaps (positive and negative) presented results very close to zero. Those that presented more negative Gaps were: 14 - Own parking (-1.85); 13 - Visually attractive physical facilities (-0.40); and 9 - Good market reputation for teaching quality (-0.57).

Table 9 - Dimensions of quality in services

Items of each question	Performance		Expectation		GAP
	Average	Standard deviation	Average	Standard deviation	P-E
Customer Care	4,39	0,76	4,35	0,80	0,04
1. Solidarity and security in solving problems	4,38	0,80	4,35	0,81	0,03
2. Confidence transmitted by teachers	4,49	0,71	4,66	0,70	-0,17
3. Service at scheduled times	4,35	0,76	4,26	0,79	0,09
4. Staff and teachers always available to help clients (students)	4,45	0,74	4,42	0,81	0,03
5. Personalized attention to clients (students)	4,18	0,83	3,98	1,00	0,20
6. Courteous staff	4,51	0,71	4,38	0,80	0,13
7. Courteous teachers	4,39	0,74	4,43	0,70	-0,04
Teaching Level and Environment	**4,12**	**0,87**	**4,41**	**0,75**	**-0,30**
8. Teachers fluent in language and didatics	4,48	0,71	4,68	0,54	-0,20
9. Good reputation in the market for quality teaching	3,75	1,04	4,32	0,87	-0,57
10. Environment conductive to study (existence of teaching laboratories and comfortable classrooms)	4,23	0,80	4,49	0,70	-0,26
11. Good location	4,03	0,93	4,17	0,89	-0,14
Tangible	**3,13**	**1,02**	**3,92**	**0,90**	**-0,80**
12. Modern equipment	3,90	0,84	4,04	0,75	-0,14
13. Visually attractive physical facilities	3,50	1,07	3,90	0,89	-0,40
14. Own parking	1,98	1,15	3,83	1,07	-1,85

Source: Elaborated by the authors from the interviews conducted with the students of the language school analyzed.

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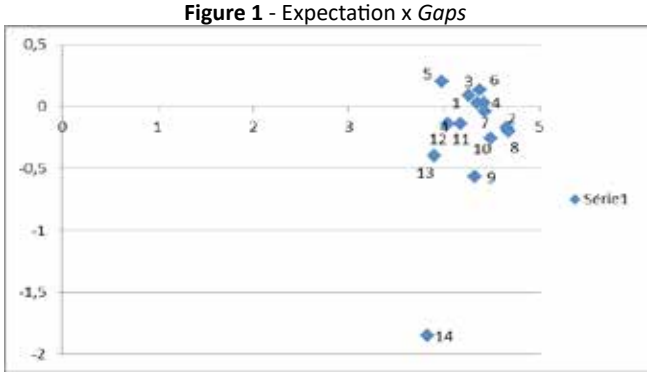
An alternative of prioritizing the items that should be considered in a short-term service improvement strategy is the construction of a matrix that presents a joint analysis of the importance of the item to customers (average expectation) and quality level (Gap average) observed in relation to the item, as proceeded in Machado, Queiroz and Martins (2006). The higher the expectation and the Gap, the more critical the item becomes. Said matrix for the case studied is shown in Figure 1.

As can be seen, the items are close to each other in the graph, since the values of expectations and Gaps for the 14 items analyzed are very close. Only the immediate need for action for items 14, 13 and 9 is clearly highlighted through this analysis. For the other items, the analysis through this chart was impaired.

Figure 1 - Expectation x *Gaps*



Source: Own elaboration

Legend: 1. Solidarity and security in solving problems; 2. Confidence transmitted by teachers; 3. Service at scheduled times; 4. Staff and teachers always available to help clients (students); 5. Personalized attention to clients (students); 6. Courteous staff; 7. Courteous teachers; 8. Teachers fluent in language and didatics; 9. Good reputation in the market for quality teaching; 10. Environment conductive to study (existence of teaching laboratories and comfortable classrooms); 11. Good location; 12. Modern equipment; 13. Visually attractive physical facilities; 14. Own parking

Thus, we also performed the quartile analysis, as proposed by Freitas, Manhães and Cozendey (2006), and the result is that presented in Table 10.

Quartiles analysis consists of dividing the samples into four groups, called quartiles. The first corresponds to 0 to 25% of the samples, the second quartile of 25% and goes to the median of the samples, the third is between the median and 75% of the samples and the fourth and last quartile is the highest value of samples, i.e., 75% to 100%. All questions with values below 25%, that is below the first quartile, are the questions that ask the priorities to be improved. The questions that lie in the range between the first and second quartile are those that need attention. The questions belonging to the interval of the third quartile are those that need to be improved in the future. And the questions that are in the last interval, between the value of the third and the maximum obtained in the averages, are the questions that obtained the best scores and do not need attention (Freitas, Manhães *et* Cozendey, 2006).

As shown in Table 10, the first quartile contains the most critical points already shown in Figure 2. Therefore, these should receive emergency action. The items that need attention in the short term are: 10 - Environment conducive to the study (existence of teaching laboratories and comfortable rooms 8 - Teachers with fluency in language and didactics 2 - Confidence transmitted by teachers 11 - Good location; and 12 - Modern equipment. The items that need improvement in the future are: 7 - Courteous teachers, 1 - Solidarity and security in solving problems, and 4 - Staff and teachers always available to help clients (students). Finally, the items for which there is no need for changes, according to the quartile analysis, are: 3 - Service at scheduled times, 6 - Courteous employees, and 5 - Personalized attention to clients (students).

Exemplifying the possible actions to be taken to address the problem regarding the most critical items, it is recommended to check the possibility of possible reforms to improve the appearance of the school and replacement of accommodations that are not appropriate. In order to act on the parking problem, one option is for the school to verify the feasibility of making agreements with nearby parking lots, making vacancies available to its students. Finally, in relation to the school's reputation for teaching quality, action necessarily involves a more forceful analysis of the conditions of the resources used to conduct the lessons, such as equipment and didactic laboratories and the didactic skills and abilities of their teachers, items that were included in the second quartile.

Thus, only with the improvement of these requirements can the school's reputation be improved as to the quality of the teaching it has to offer.

6. CONCLUSIONS

The objective of this study was to present a possible set of attributes and dimensions that make up the quality of services in language schools. Through exploratory factor analysis, the following dimensions were reached: 1) customer care, referring to the form of treatment given to the client (students) by the staff and teachers of the language school; 2) teaching level and environment, related to the quality of teaching, the existence of an environment conducive to study and easy accessibility, existence of trained professionals and recognition by the community of the quality of teaching used in school; and 3) physical facilities, concerning the quality and appearance of physical facilities and equipment of the language school.

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Table 10 - Analysis of quartiles to identify the most critical items

Question	14	9	13	10	8	2	11	12	7	1	4	3	6	5
Gap	-1,85	-0,57	-0,4	-0,26	-0,2	-0,17	-0,14	-0,14	-0,04	0,03	0,03	0,09	0,13	0,2
Quartil	1st Quartil					2nd Quartil				3rd Quartil			4th Quartil	

Source: Own elaboration

Since the installation of the proposed scale was also based on the SERVQUAL instrument, it is expected that, through this study, there would have been a contribution to the adaptations to this instrument, so that it includes aspects specific to each type of service analyzed. This procedure increases the validity of the measurements performed.

The evaluation of the quality of services offered by the company has brought evidence that it has met the expectations of its consumers with regard to the customer care dimension. On the other hand, the perception of its clients regarding the teaching level and environment and the physical facilities has not been positive.

In a more specific view, the attributes for which the highest negative gaps were obtained were: own parking, visually attractive physical facilities, and a good reputation in the market for teaching quality. For such evidence, improvement actions were suggested, such as improving the school's appearance and replacing accommodations that are not adequate, checking the possibility of making agreements with nearby parking lots, providing places for students, and improving the resources used to conduct classes , such as equipment and didactic laboratories, as well as the qualifications and didactic capacities of its teachers, aiming at a consequent improvement in the reputation of the school as to the quality of teaching.

Finally, considering the statistical tool that corroborated the conclusions obtained, it is believed that the determinants of the quality identified can be mostly considered by other language schools.

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