DEMETRA
Alimentação, Nutrição & Saúde

Mariana Vieira Barbosa[1]
Tamira Guilherme Rocha[1]
Tânia Muzy Da Silva[2]
Karla Andrea Dulce Tonini[2]
Thadia Thuron Costa da Silva[1]
Silvia Regina Magalhães
Couto Garcia[1]

[1] Universidade Federal do Rio
de Janeiro, Instituto de Nutrição
Josué de Castro, Departamento
de Nutrição e Dietética. Rio de
Janeiro, RJ, Brasil.

[2] Universidade Federal do Rio
de Janeiro, Instituto de Nutrição
Josué de Castro, Curso de
Gastronomia. Rio de Janeiro, RJ,
Brasil.

Correspondence

Silvia Regina Magalhães
Couto Garcia

silviacouto@globo.com

Service-quality descriptors of university restaurants based on customers' perception

Descritores da qualidade do serviço de restaurantes universitários com foco na percepção dos clientes

Abstract

As far as the restaurant is concerned, food is only the end to the realization of the experience of a meal, because there are other factors considered tangible and intangible that contribute to the success of this experience of consumption. According to Parasuraman et al., what often happens is a difference between the customer's expectation of the service and the management's perception of the service provided. For this article, a qualitative study was carried out based on the SERVQUAL instrument with university students, clients of the feeding system of a public university. The focus group research technique was used to identify the main descriptors that guide the quality of the service offered by the university restaurant, according to clients' perceptions. According to the results, the SERVQUAL questionnaire generally contemplates the service studied; some specificities, however, such as speed of care, individualized care and price deserve special attention, as well as determinants such as hygiene of facilities and meal and price should be further explored in the questionnaire.

Keywords: Collective feeding. Consumer behavior. Students.

Resumo

No que se refere ao restaurante, a comida é somente o fim para a concretização da vivência de uma refeição, pois existem outros fatores considerados tangíveis e intangíveis que contribuem para o sucesso dessa experiência de consumo. Ocorre muitas vezes uma diferença entre a expectativa do cliente em relação ao serviço e a percepção da gerência sobre o serviço prestado. Para este artigo, realizou-se estudo qualitativo baseado no instrumento SERVQUAL com estudantes universitários, clientes do sistema de alimentação de uma universidade pública. Empregou-se a técnica investigativa de grupos focais, com o propósito de identificar os principais descritores que norteiam a qualidade do serviço oferecido pelo restaurante universitário, segundo a percepção dos clientes. De acordo com os resultados, o questionário SERVQUAL contempla de maneira geral o serviço ora estudado; algumas especificidades, no entanto, como velocidade no atendimento, atendimento individualizado e preço merecem atenção especial, assim como determinantes como higiene das instalações e da refeição e preço deveriam ser mais explorados no questionário.

Palavras-chave: Alimentação coletiva. Comportamento do consumidor. Estudantes.

INTRODUCTION

With respect to restaurants, food is only the means to live the experience of having a meal, since there are other tangible and intangible factors that contribute to the success of this consumer experience, i.e., the fulfillment of clients' physiological and subjective expectations. Thus, improving the quality of services is a business differential than has been given increasing importance in the market.[1]

Quality is fundamental for the growth of organizations, both in products and in services, since it works as a competitive differential against high competition in the market. But what is quality, after all? It can be defined in several ways such as value, specification conformation, compliance with prerequisites, product/service adjustment to users; loss reduction; meeting and/or exceeding consumers' expectations.[2] The current article addresses the concept of perceived quality, which is translated into the ratio between service effectiveness level and customers' expectations.

Although customers' perceptions about services depend on their personal judgment, business managers should know the expectations of their customers in order to enable performance improvements capable of favoring positive perceptions.[3] Every customer has expectations that can change depending on different situations; thus, organizations must identify the quality dimensions valued by customers and the degree of importance of each dimension.

According to Parasuraman et al.,[4] customers' expectations about the service and management's perception about the provided service are often different. Thus, managers should identify quality-determinant points in order to mitigate such discrepancy and to achieve adequate quality standards. First, the focus on quality in university restaurants showed increased expression in the supply of adequate and healthy food; however, other quality dimensions were incorporated into this service.[5]

The quality of meals supplied in university environments has been investigated to help improving the nutritional quality of students' meals served by university restaurants. Vieira et al.[6] outlined the socioeconomic, nutritional and health profile of beginner students enrolled in a Brazilian public university. Most students did not live with their families (89.8%), skipped some main meal (57.3%) and rejected one, or more, food belonging to the vegetable group (79.5%). Eutrophic patients prevailed, but 58.7% of them presented high body fat percentage. The authors of the aforementioned study concluded that there is the urgent need of taking individual and collective assistance actions focused on this specific population.

According to Alves & Boog,[7] students' housing environment and university life present limitations in the development of healthy eating practices due to lack of time, financial issues and lack of places to buy food. The authors of the aforementioned study have pointed out that, throughout the week, students eat their meals in the university restaurant due to its low price and easy access to healthy food, which was expressed as "balanced meal"; thus, in their opinion, eating at the university restaurant is a need rather than an option.

However, the long distances between students' work/school and homes, the urban acceleration, the food-advertising harassment by the media, and the economic access to food are some of the cultural transformations associated with the choice for how, where and what to eat.[8] According to results of Pesquisa de Orçamentos Familiares - POF 2008/2009 (Family Budget Survey – FBS 2008/2009),[9] eating away from home represents one third (31.1%) of the total expenses with food by Brazilian families. Eating out, in food and nutrition units, is one of the viable food-access alternatives for an expressive part of the population.[8]

Universidade Federal do Rio de Janeiro (Federal University of Rio de Janeiro) had 11 university restaurants (called "bandejões") that served all campi until 1991. However, they

were deactivated due to political and economic issues faced by the institution. In recent years, students, supported by Centros Acadêmicos (Academic Centers) and by Diretório Central dos Estudantes (Central Students Directorate), have intensified the mobilizations in the fight for reopening these "bandejões". On the other hand, Comissão de Implantação do Sistema de Alimentação da UFRJ (UFRJ Food System Implementation Committee) was launched in 2004 in order to plan and organize new university restaurants (UR). In 2008, Restaurante Universitário Central (Central University Restaurant) and Refeitório Satélite do Centro de Letras e Artes - CLA (Satellite Refectory of the Arts and Literature Center) were launched on Ilha do Fundão (Fundão Island) campus, based on a system of meals transported from an outsourced meal-producing unit as the initial step of the food system of UFRJ.

The administrative and academic proposal for the reactivation of the UFRJ food system highlighted the recovery of socialization spaces in the institution's campus. In addition, this proposal helped assuring a healthy diet for all students, in compliance with governmental policies and with Plano de Reestruturação e Expansão das Universidades Federais – REUNI - (Plan for the Restructuring and Expansion of Federal Universities). Thus, it is an instrument capable of overall contributing to democratize the permanence of students who face unfavorable socioeconomic conditions.[10]

Thus, the UFRJ food system, in compliance with Política de Segurança Alimentar e Nutricional (Brazilian Food and Nutrition Security Policy), has the aim to produce and distribute balanced (according to nutritional principles focused on promoting and maintaining the health of its students and workers), culturally diversified and safe (from the hygienic-sanitary, environmental and social viewpoint) meals.[10]

Therefore, it is essential identifying the quality determinants perceived at URs in order to support management processes focused on customers' satisfaction. Such satisfaction refers not only to the human omnivorous condition - i.e., people's ability to eat everything -, but also to several factors that influence individuals' food choices.[11] In addition, it comprises variables such as values, reliability, beliefs or expectations, intentions, involvements and experiences.[12] Therefore, the overall aim of the present study was to identify the descriptors guiding the quality of the service provided by a UR, based on customers' perception.

Characterization of UFRJ's food system

UFRJ's food system comprises the Central UR, which is located near Centro de Ciências da Saúde (Health Sciences Center) in the University Campus at Ilha do Fundão, and two satellite cafeterias (SC) also located in Cidade Universitária (University City): one at Centro de Letras e Artes (Arts and Literature Center) and the other one at Centro de Tecnologia (Technology Center). The Central UR is an Unidade de Alimentação e Nutrição – UAN (Food

and Nutrition Unit), which was planned for the daily production of four thousand meals. It prioritizes a rational flow of processes, people, materials and waste; production safety; the comfort of its users and the quality of life at work; besides contemplating environmental impact-reduction aspects.

The menu was initially prepared in a central food processing unit of the outsourced company, outside the University City. Preparations were placed in isothermal boxes with gastronorm-type containers and, then, they were transported to the Central UR and to the SCs, where the process was finished, and the meals were maintained and distributed to customers. In order to carry out these operations, UAN/RU had the following work areas: reception platform, meal-finalization area, meal-maintenance area, cafeteria, cafeteria utensil-cleaning room, trash chamber, material- stocking room, administrative room, toilets and locker rooms.

Nowadays, the Central UR has a complete physical structure focused on the preparation of meals, whose distribution is done on-site; it also supplies the SC of the Technology Center. Meals served in the SC of CLA continue to be transported from the main unit of the outsourced company.

UFRJ's food service offers lunch and dinner, and its menu structure comprises an entry (salad or soup), the main course, a garnish, side dish (rice and beans), dessert (fruit or sweet) and drinks. The cost of this meal is subsidized by UFRJ and students are charged R$ 2.00 (two reais) per meal. The UR opens from Monday to Friday, from 11am to 2pm. The Central UR serves 3,100 meals at lunch and 1,200 meals at dinner; the SC in the Technology Center serves 1,300 meals at lunch and 800 meals at dinner; whereas the one at CLA serves 1,200 meals at lunch and 900 meals at dinner.

Theoretical background

The term "quality" does not have a clear and objective definition; its interpretation depends on the viewpoint of who analyzes and/or plans the service or product, as well as on what quality means for the involved cases.[2]

Quality has become an effective customer requirement; however, the definition of systematic policies focused on the implementation of quality programs in companies, mainly in small- and medium-sized companies, remains delayed probably due to misinformation or to lack of understanding about technical language concerning quality principles.[13]

Walter et al.,[13] have analyzed several concepts of services and emphasized that services generate value and provide benefits to customers when they are served. Therefore, providing quality services does not only lie on using sales tools; it is a way to gain competitive advantage in the long term by meeting customers' expectations.

The management of services has a differential in comparison to the management of products, because services are experiences lived by customers, whereas products are goods that can be owned. Based on these precepts, services were classified based on some special characteristics such as: intangibility; need of having customers present and participating in the process, and simultaneity between production and consumption.[14]

According to Grönroos,[15] the quality of services should be, above all, "what customers perceive". Based on this viewpoint, Parasuraman et al.,[4,16,17] stated that the perceived quality of services results from comparisons between customers' perceptions and expectations, i.e., it is determined by the difference between the expected quality and the quality received during service provision, whether, or not, it fulfills customers' satisfaction.[18]

Parasuraman et al.[4] have developed a service quality evaluation model based on comparisons between perceived and expected services. These criteria were grouped into 10 categories called "service-quality determinants", namely: accessibility, communication, competence, courtesy, credibility, reliability, responsiveness, security, tangibles, understanding/knowledge (Figure 1).

Figure 1. Service-quality determinants.
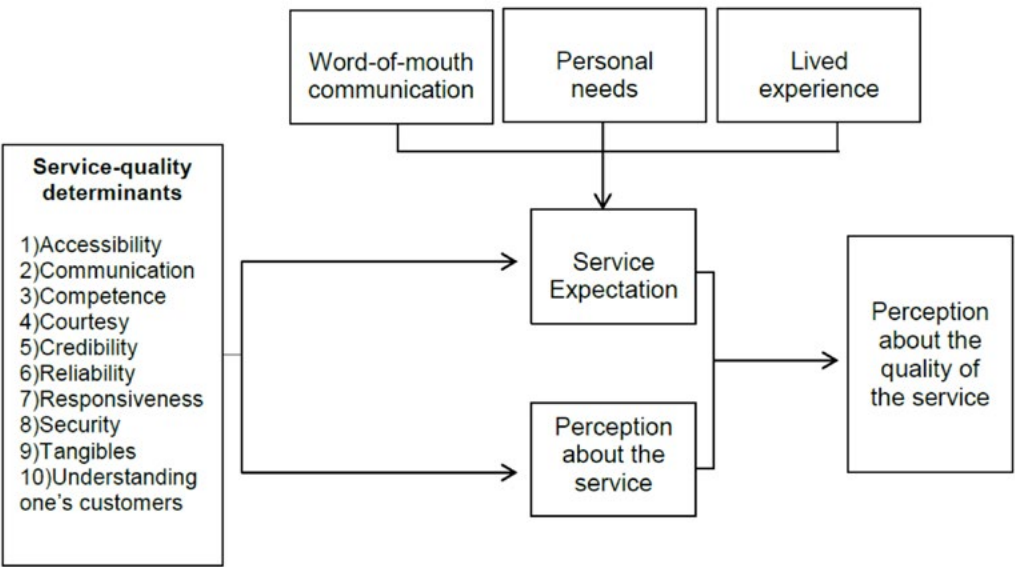
Source: adapted from Parasuraman et al (1985).

According to Parasuraman et al.,[4] customers' expectations are influenced by their personal needs and previous experiences, as well as by word-of-mouth and external communications. The aforementioned authors present 3 possibilities in the relationship between customers' expectations and perceptions: perceived quality is quite satisfactory and tend to be ideal when customers' expectations are smaller than their perceptions; perceived quality is satisfactory when customers' expectations are equal, or similar, to their perceptions; and perceived quality is unsatisfactory when customers' expectations are greater than their perceptions. According to these authors, there is often discrepancy between customers' expectations and management's perception; thus, the aim of the service is to reduce such discrepancy to reach adequate quality standards.

Further studies conducted by Parasuraman et al.[17] found high correlation among quality determinants such as communication, competence, courtesy, credibility and security, as well as between accessibility and understanding. Thus, these quality determinants were reduced to 5 (Chart 1) in order to be used as basis to develop the service quality measurement instrument called SERVQUAL. The scale was developed in different sectors, since it was meant to be generic and applicable to all types of organizations and service branches. However, Parasuraman et al.,[19] suggested adaptations, whenever necessary, according to specifications set in other studies.

Chart 1. Description of service-quality dimensions.

Quality dimensions	Definition
Tangibles	Appearance of facilities, buildings, equipment, personnel and communication materials.
Reliability	Ability to deliver the service in a safe and accurate manner.
Responsiveness	Willingness of employees to serve users and to provide fast service.
Security	Employees' knowledge, politeness and ability to build up credibility and trust.
Courtesy	Consideration and individual attention given by the company to its users.

Source: Parasuraman et al.[15]

According to Parasuraman et al.,[4] SERVQUAL is a tool comprising a multi-item scale with good reliability and validity, which can be used by organizations to better understand customers' expectations and perceptions about the service provided to them. Thus, the comparison between provided services and customers' expectations enables managers to identify companies' potentialities and weaknesses in order to continuously improve based on the analysis of the "service quality gap model" (Figure 2)..

Figure 2. Service quality model adopted in the SERVQUAL scale.
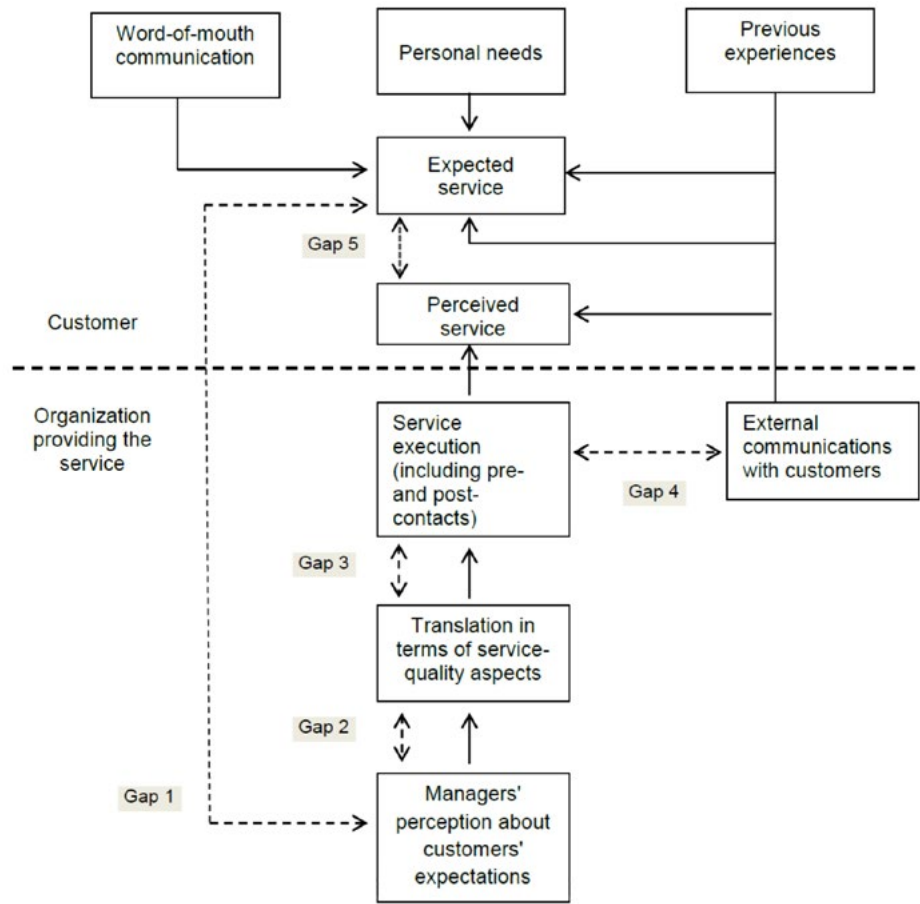
Source: Parasuraman, Zeithaml and Berry (1985, p. 44).

The 5-gap model was developed to help managers understanding the sources of service quality issues and figuring out how to improve them. The model allows analyzing these issues in separate. However, the Gap 5 analysis is the essence of using the SERVQUAL model developed by Parasuraman et al.,[4] since in case of failure in this Gap, all other gaps should be analyzed and corrected.[20]

The starting point for the selection of specific descriptors of the university restaurant segment, based on each service-quality determinant already defined by Parasuraman et al.,[16] (Chart 1), may also help identifying the need of including other determinants, besides the 5 ones suggested by these authors,[16] in order to help analyzing the quality of the service provided by the university restaurants at UFRJ.

METHODS

Data collection

The present qualitative study was carried out with university students, who were customers of the UFRJ food system (users of the Central UR and SRs) and who lived, or not, in the institution's campus. It adopted the investigative technique known as focus groups in order identify the descriptors guiding the quality of the service provided by the university restaurant.

The focus group technique enables qualitative data to be collected in group sessions where people associated with the central theme of the study - such as their age group, professional occupation or the role they play in the community - discuss about several aspects of a specific theme.[7] Knowledge deepening and comprehensiveness are the main interest in this type of study, whereas sample size does not result from mathematical needs.[21]

The current study was evaluated and approved by Comitê de Ética em Pesquisa do Instituto de Estudos em Saúde Coletiva/UFRJ (Research Ethics Committee of the Institute for Collective Health Studies/UFRJ), under opinion N. 12/2010, case N. 02/2010, in compliance with the guidelines and regulatory norms set by Conselho Nacional de Saúde (National Health Council). All participants were previously clarified about the purpose of the study and about the techniques they would be subjected to. Two focus groups were held with UR customers, who nowadays comprise university students, after they signed the free and informed consent term.

Students who participated in the first focus group were invited to participate in the research while they waited in line to eat at the university restaurant. The second focus group comprised students living in student residences; it was held in the cafeteria of the accommodation during snack time. Both focus groups comprised 9 graduate students enrolled in different courses. Differences between groups were based on the fact that students living in the student residences ate their meals only in the UR, whereas other students had other alternatives, fact that generated differences in their perception about the quality of the service.

The focus groups discussed about issues such as the features of an UR, its quality factors, people's motivation to eat at the UR/UFRJ, positive and negative points in the service provided by the UR/UFRJ; in the end, debates were opened for further comments and/or experience reports. Each debate lasted for approximately 1 hour and followed a previously elaborated script.

The discussed issues were: "In your opinion, what does characterize a university restaurant?"; "In your opinion, what are the quality factors that university restaurants should have?"; "What would be the order of importance of these factors?"; "Why do you go to the UR?"; "What are the main positive points in the service provided by the UR/UFRJ?"; "What are the main negative points in the service provided by the UR/UFRJ?"; "Would you like to make comments about/describe some experience?"

The focus group team comprised 1 moderator, 2 rapporteurs and 2 observers/recording operators; whereas the post-group team comprised 2 transcribers/typists, as suggested by Neto et al.[22]

The transcribed text was analyzed in pursuit of descriptors (any word or expression that could describe the university restaurant service), which were later classified into categories corresponding to the five quality dimensions defined by Parasuraman et al.[16]: tangibles, reliability, responsiveness, security and courtesy.

Therefore, it is worth emphasizing that the current study does not intend to present the content analysis of the lines transcribed from the focus groups, but to reveal descriptors, i.e., any word or expression that can describe the service provided by university restaurants, based on service-quality determinants suggested by Parassuraman et al.[16]

RESULTS AND DISCUSSION

Both focus groups comprised 9 students older than 18 years, who were enrolled in different undergraduate courses and who showed availability and interest in participating in the study. Table 1 presents participants' characterization.

Table 1. Characterization of subjects participating in focus groups.

Students who did not live in the student housing				Students who lived in the student housing			
Subject	Sex	Age	Course	Subject	Sex	Age	Course
A1	F	21	Nutrition	A2	M	23	Biology
B1	F	28	Physical Education	B2	M	19	Biology
C1	F	25	Physical Education	C2	M	23	Geography
D1	M	22	Computer Science	D2	M	29	Music
E1	M	21	Computer Science	E2	F	19	Visual Arts
F1	M	23	Computer Science	F2	F	20	Architecture
G1	M	22	Computer Science	G2	M	22	Dance
H1	M	22	Computer Science	H2	F	25	Design
I1	M	22	Computer Science	I2	M	30	Design

Source: Parasuraman et al.[15]

Based on discussions, descriptors were listed for each of the quality determinants set by Parasuraman et al.,[16] as shown in Chart 2.

Chart 2. Descriptors listed in the current study for each determinant defined by Parasuraman et al.[15] for the segment "university restaurant".

Definition based on Parassuraman et al.[15]	Descriptors listed in the focus groups
Tangibles Aesthetics of facilities, buildings, equipment, personnel and communication materials	ample space; communal area; equipment for entry; ambient music; comfort provided by facilities; furniture in good condition; restroom location; lighting; climatized environment; visually-clean environment;
Tangibles Aesthetics of facilities, buildings, equipment, personnel and communication materials	clean facilities; Website for menu disclosure.
Responsiveness Employees' willingness to serve users and to provide fast service	service; long wait; fast service; responsiveness in serving; training (agility of waitresses).
Courtesy Consideration and individual attention given by the company to its users	opening hours; individualized attention; service provided for everyone.
Reliability Ability to deliver the service in a safe and accurate manner	healthy eating; tasty meal; assorted menu; balanced diet; non-finalization of distribution before schedule; environmental responsibility; price.
Security Employees' knowledge, politeness and ability to build up credibility and trust	Quality of the meal

Source: Parasuraman et al.[15]

Based on descriptors collected from students' speeches recorded in the focus groups, discussions revealed the appreciation of tangible aspects, i.e., the ones referring to physical facilities, equipment and to the appearance of personnel and communication materials. Particular attention was paid to refectory-associated aspects such as comfort and cleanliness, which can provide a pleasant environment for customers.

> F1: A well-lit environment, because dark environments are awful … and it is air-conditioned too.
>
> E1: the place is very nice, for me it is the most pleasant place in the university.
>
> H2: [...] a wide space, it is not claustrophobic.

According to Jesus,[23] customers choose establishments that care about tangible items, since these items provide a pleasant environment and comfort to customers. According to Tinoco & Ribeiro,[24] distinct groups of customers of à la carte restaurants perceived the environment, cleanliness, support facilities and decoration as the main quality attributes. Braga et al.,[5] conducted a study in a university restaurant in Ponta Grossa County and found that the lack of tangible attributes such as physical space, furniture and cleanliness caused significant customer dissatisfaction towards the investigated establishment. The importance of these attributes results from the materialization of customers' expectations, which legitimates their consumption experience.[1]

During the discussion about communication materials, participants mentioned the desire to know the menu of the day in advance.

> E1: Another point would be to have a slightly more anticipated menu, for example, we have access to computers and to the internet all day long; so, if I could know what the restaurant would be serving in a specific day, and if I did not like it, I would not even go there.

This speech led debaters to discussions about students' time and their need to manage it between their academic activities and their displacement to eat at the UR. This point does not corroborate what Alves & Boog[7] highlighted in their study. Based on their findings, the lack of time in university students' life limits the development of healthy eating practices. Thus, not knowing the menu in advance can hamper students' access to a healthy diet and reduce their adherence to the UR.

Service speed was categorized by participants as one of the most important quality factors of university restaurants, since students often have a brief time between classes to eat their meals. However, long wait was also highlighted, since it happened due to the considerable number of students in the UR, which often generated queues. It was one of the negative points of the service mostly discussed in the focus groups, as shown below:

> D1: I think that, above all, it must be fast to allow us to have the right amount of time to eat and to get in class on time; this is the main criterion.
>
> G2: […] the organization of the queue, I mean, to have access to the food actually get to have lunch; this is the main point.

There is the need of improving the management of determinant "reliability" in university restaurants; this determinant refers to the ability of delivering the promised service in a reliable and accurate manner.

Coutinho et al.[25] also observed that long queues are common in university restaurants and that users need to wait a long time to have lunch. In addition, the number of customers can increase depending on the menu of the day, which leads to long queues and wait. Braga et al.[5] have found 73.25% students' dissatisfaction with service time at the university restaurant of Ponta Grossa County. This outcome showed the need of improving the quality of the service in this regard, since customers have little time to eat their meal and to go back to their activities.

Customers simultaneously valued the speed of the service provided by the UR and showed concern with individualized treatment and attention, which can be contradictory to the speed of the service. However, this issue was reported based on arguments associated with the waste of food.

> G2: […] it is a serious problem, they put a lot of rice and beans, and the customer does not eat everything; then, there is plenty of leftovers that go to the garbage can.
>
> C2: […] but if they at least listen before they act, they can avoid the waste of food and customers' dissatisfaction […] not everyone eats the same amount of food, some eat more, others eat less. Give customers what they want; if they eat little give them less food, if they do not want beans, do not give them beans.

Based on these excerpts, students expressed the desire to be heard by the waitresses during the distribution/portioning of the meal. This finding highlights the importance given to determinants "responsiveness" and "courtesy" when it comes to the quality of the provided service. In the case of UR, the portioning of the menu is estimated based on the energy demands of customers, which can change from one customer to another. Customers' satisfaction can be achieved when they perceive that they are being heard and that the company values their preferences.[26] In addition, manifestations about the importance given to customers' opinion about the service provision were also placed during the debates:

> E1: For example, there is that green papaya candy, I think the guys do not like it; if I could, I would say I do not like this one, and they could improve the food based on customers' taste.
>
> G1: […] once they served banana and fish skewer and it was very good, but they never served it again.

In this case, quality in food services can be seen as a nutritional process focused on meeting people's physiological needs; as well as their hygienic-sanitary needs, through the provision of safe food; and their sensorial and symbolic needs, in which pleasure and meaning are important for customers' perception about quality.[27]

According to the dietician responsible for the management of institutional feeding services, the hygienic-sanitary quality of the meals is a fundamental element, since it involves customers' health. This type of establishment must comply with Boas Práticas de Fabricação (Good Manufacturing Practices - GMP) regulated by ANVISA, through Resolution RDC/ANVISA N. 216/2004.[28] It is a set of standards and procedures adopted for food services to assure food hygiene.

Jesus,23 Pinheiro et al.[29] and Tinoco & Ribeiro[24] conducted studies in the same research field and evidenced the need of adding the determinant "food hygiene" to the already adopted ones, in order to evaluate this branch of service, given the importance of providing food security to their customers. Parasuraman et al.16 defined the "security" dimension based on the idea that the establishment should inspire confidence. It makes it imperative including this theme in the evaluation of customers' perceived quality about university restaurant services, although the issue did not clearly appear in the focus group discussion because it was implicit in participants' understanding about healthy eating.

Meal quality-associated descriptors mentioned by participants were "healthy/balanced diet", "tasty meal" and "menu variation", which evidenced not only consumers' awareness about the role played by food in their health, but also the importance given to sensory aspects.

> I2: […] when we get there, at least they have more balanced, healthier food.
>
> H2: I remember that the time I joined the university, in 2002, it did not have UR. My last morning class finished at 12:00 pm and I had to go back to the following class at 01:00pm. So, I had to buy snacks in a food truck and, consequently, I spent the entire week feeling terrible, super heavy.
>
> G1: The food varies a lot during the week, it is never the same … I think that whoever chooses the menu of the day, does it better than I do and saves me a lot of work.

Such descriptors should be included in the evaluation of the service; they are associated with determinants "security" and "reliability" because, as the service is composed of a team of nutritionists, the menu is balanced to meet customers' nutritional needs. This process gives some reliability to the quality of the food eaten by customers and makes it the best feeding option on campus.

Pinheiro et al.[29] conducted a study about the quality perceived in typical-themed restaurants and observed the need of inserting descriptors associated with the quality of the meal, such as menu variety and taste of the food. Similarly, Ribeiro & Tinoco[24] have found that menu variety in à la carte restaurants was a key factor affecting customers' perceived quality.

However, price was the most often mentioned descriptor throughout the focus group; it was inferred as the main reason for customers to eat at the university restaurant, i.e., price was responsible for assuring students' access to meals. Price was also mentioned in comparisons to the quality of the served meal (cost/benefit ratio) as seen in the following opinions:

> I1: I think the quality of food is important too, we hear people talking about other URs, where the food is cheap, but no one can stand it.

> A2: Price is strongly relevant because we save a lot more by eating here than in other places.

Price is one of the most essential elements in the purchase-related decision-making process. It must be fair and encourage customers to buy things, besides enabling the usefulness perceived by consumers and being within the range they are willing to pay for a given product.[30] Based on results of a study conducted by Braga et al.[5] in a university restaurant, price played a significant role in customers' perception about quality and was evaluated in a satisfactory way by participants; changes in this segment involve changes in government policies.

Students payed R$ 2.00 for the meals sold at the university restaurant of UFRJ, and this factor was mentioned many times, since most university students classified the price of the food served in the UR as fair. This matter takes on social dimensions as it makes it possible assessing the access to the UR as an indicator of university student-assistance policy.

In 2005, Núcleo de Pesquisa de Opinião da UFRJ (UFRJ Opinion Research Center) published the study entitled Restaurante Universitário: direito ou necessidade? (University Restaurant: right or necessity?), whose aim was to provide subsidies to help managing students' food and transportation issues. Results showed that 66.86% of students ate (lunch and/or snack) in food trucks and/or restaurants in the campus, as well as that most of these students spent from R$ 5.00 to R$ 7.90 per meal on a daily basis, which was more expensive than the meal offered by the university restaurant.[10]

Price was also taken into consideration by Zeithaml & Carl[31] in the determinant "reliability" and it was successfully used by Jesus[2], Pinheiro et al.[29] and Tinoco & Ribeiro[24] to evaluate quality in the same segment of restaurants

CONCLUSIONS

The focus group technique allowed identifying the main descriptors among quality determinants perceived by university restaurant customers, based on the opinion of distinct groups of customers (students living, or not, in student residences).

Based on the current results, the SERVQUAL questionnaire overall contemplates the herein investigated service, although some service specificities such as service speed, individualized service and price deserve special attention. Therefore, the continuity of the study will be based on the proposition of a questionnaire model capable of evaluating the quality perceived in these establishments, since determinants such as the hygiene of the premises and of the meal, and price were mentioned by participants and should be further explored in the questionnaire. The model will be based on the proposal by Parasuraman et al.[4], with some design modifications and, mainly, with greater detailing of fundamental points of the model of services delivered in university restaurants. Among these points, one finds the quality of the served food, the price and the ability to meet the demand of the university.

We emphasize the need of conducting further studies in university environments in order to enable the comprehensive analysis of complexities involving the university food system. These studies can also help improving the knowledge about such system, as well as enable a better comparison between services and the construction of a more appropriate quality measurement instrument to be applied to this segment in order to allow continuously improving the provision of services.

FINANCIAL SUPPORT

REFERENCES

1. Domingues O, Gouvêa MA. Qualidade percebida em atividades de gerenciamento por categoria em supermercados. Revista de Gestão2012; 19(4): 589-608.

2. Mainardes EW, Lourenço L, Tontini G. Percepções dos conceitos da qualidade e gestão pela qua-

lidade total: estudo de caso na universidade. Revista Eletrônica de Gestão Organizacional 2010; 8(2): 279-297. Disponível em <http://www.revista.ufpe.br/gestaoorg/index.php/gestao/article/view/200>.

3. Reis ICSA. Escala SERVQUAL modificada: avaliação da qualidade percebida do serviço de lazer oferecido por um complexo poliesportivo num parque florestal. [Dissertação]. Florianópolis, SC: Universidade Federal de Santa Catarina (UFSC);2001.

4. Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. Journal of Marketing 1985;49(4):41-50.

5. Braga AC, Pereira TL, Andrade PP Jr. Avaliação de restaurante universitário por meio de indicadores de qualidade. In. Anais IV Congresso Brasileiro de Engenharia de Produção, dez. 2014; Curitiba, Brasil. Paraná; 2014. p. 306-326.

6. Vieira VCR, Priore SE, Ribeiro SMR, Franceschini SCC, Almeida LP. Perfil socioeconômico, nutricional e de saúde de adolescentes recém-ingressos em uma universidade pública brasileira. Revista de Nutrição 2002; 15(2):273-282.

7. Alves HJ, Boog MCF. Promoção de saúde e comensalidade: um estudo entre residentes de moradia universitária. Segurança Alimentar e Nutricional 2006;13(2): 43-53.

8. Cardoso RCV, Souza EVA, de Santos PQ. Unidades de alimentação e nutrição nos campi da Universidade Federal da Bahia: um estudo sob a perspectiva do alimento seguro. Revista de Nutrição2005; 18(5): 669-680.

9. Instituto Brasileiro de Geografia e Estatística (IBGE). Pesquisa de Orçamentos Familiares 2008-2009. Relatório Preliminar. Disponível em: <www.ibge.gov.br>.

10. Universidade Federal do Rio de Janeiro. Laboratório de Gestão da Comunicação e da Cultura das Organizações da FAAC, Núcleo de Pesquisa de Opinião da UFRJ, Bandejão: Direito ou Necessidade?; 2005.

11. Jomori MM, Proença RP da Costa, Calvo MCM. Determinantes de escolha alimentar. Revista de Nutrição2008; 21 (1): 63-73.

12. Gedrich K. Determinants of nutritional behavior: a multitude of levers for successful intervention? Appetite 2003;41(3): 231-8.

13. Walter SA, Tontini G, Andrade K.de A, Bach TM. Qualidade percebida de stakeholders com estratégia de melhorai dos serviços. Revista Eletrônica de Estratégia Negócios 2014; 7(1). Disponível em: <http://portaldeperiodicos.unisul.br/index.php/EeN/index>.

14. Gianese IGN, Correa HL. Administração estratégica de serviços: operações para a satisfação do cliente. São Paulo: Atlas; 2013.

15. Grönroos C, Marketing, gerenciamento e serviços: a competição por serviços na hora da verdade. Rio de Janeiro: Campus; 1995.

16. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: a multiple-item scale for measuring consumer perceptions. Journal of Service Quality Retailing Spring 1988; 64:12-40.

17. Parasuraman A, Zeithaml VA, Berry LL. Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria. Journal of Retailing 1994;70(3): 201-230.

18. Kotler P. Administração de Marketing.10. Ed. São Paulo: Prentice-Hall; 2000.

19. Parasuraman A, Berry LL, Zeithaml VA. Refinement and reassessment of the SERVQUAL scales. Journal of Retailing 1991;67(4): 420-50.

20. Freitas ALP, Bolsanello FMC, Viana NRNG. Avaliação da qualidade de serviços de uma biblioteca universitária: um estudo de caso utilizando o modelo Servqual. Ciência da Informação 2008;37(3): 88-102.

21. Sampaio MFA, Kepple AW, Segall-Corrêa AM, Oliveira JT, Panigassi G, Maranha LK et al. (In) Segurança Alimentar: experiência de grupos focais com populações rurais do Estado de São Paulo. Segurança Alimentar e Nutricional 2006;13(1): 64-77.

22. Neto OC, Moreira MR, Sucena LFM. Grupos focais e pesquisa social qualitativa: o debate orientado como técnica de investigação. In: Anais do XIII Encontro da Associação Brasileira de Estudos Populacionais; nov. 2002; Ouro Preto, Minas Gerais, Brasil. Ouro Preto; 2002. p 26.

23. Jesus AA. Satisfação de clientes de serviços de restaurantes: um estudo na cidade do Salvador-BA. [Dissertação]. Santa Catarina: Universidade do vale do Itajaí (UNIVALI); 2005.

24. Tinoco MAC, Ribeiro JLD. Estudo qualitativo dos principais atributos que determinam a percepção de qualidade e de preço dos consumidores de restaurantes à la carte. Gestão da Produção 2008; 15(1): 73-87.

25. Coutinho EP, Moreira RT, Souza DM. Aplicação do ciclo de serviços na análise da gestão da qualidade de um restaurante universitário. In: XXV Encontro Nacional de Engenharia de Produção. Nov. 2005; Porto Alegre, RS, Brasil. Porto Alegre; 2005. p 1247-1254.

26. Tinoco MAC, Ribeiro JLD. Modelagem robusta para a satisfação de clientes de serviços. Prod. 2014; 21(1): 104-117.

27. Poulain JP. Sociologia da Alimentação. Florianópolis: Editora da UFSC (Série Nutrição); 2004.

28. Brasil. Ministério da Saúde. Resolução RDC no 216, de 15 de setembro de 2004. Aprova o regulamento técnico de boas práticas para serviços de alimentação. Diário Oficial da União, Brasília, 2004.

29. Pinheiro FA, Leite AAM, Oliveira MSA. Avaliação da qualidade percebida em um restaurante temático-típico. Revista Gerenciais 2008;7(1): 53-59.

30. Vieira RSG, Mello SCBA. Percepção de Qualidade dos Serviços de Alimentação do SESC. [Dissertação]. Santa Rita: UFPE; 2001.

31. Zeithaml KAW, Carl P. Measuring organizational knowledge: a conceptual and methodological framework. Strategic Management Journal 2003; 24: 763-772.

Contributor

Barbosa MV participated in the design and the analysis and interpretation of data; Rocha TG participated in the design and the analysis and interpretation of data; Da Silva TM and Tonini KAD participated in the writing of the article and your final version; da Silva TTC participated in the study design, the writing of the article; Garcia SRMC worked at all stages from conception of the study until the review of the final version of the article.

Conflict of interest: the authors declare that there is no conflict of interest.