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ASSESSMENT OF SERVICE QUALITY IN THE SECTION OF FRUITS AND VEGETABLES IN RETAIL FORMATS

Avaliação da qualidade de serviço na comercialização de avaliação da qualidade de serviço na comercialização de frutas, legumes e verduras nos formatos de varejo

ABSTRACT

Fresh products are distributed by various retail formats such as supermarkets, street markets, *varejões*, and *quitandas*. The purchase of these products by consumers depends on numerous factors such as satisfaction with the service, product quality, facilities, cleanliness and hygiene of the place, proximity, among other factors. The supermarkets have occupied the place of street markets in selling fruits and vegetables due of the convenience and payment forms. Thus, this research aims to perform an evaluation of the service quality in street markets and in the section of fruits and vegetables (FV) in supermarkets at a city called *Tupã* in *São Paulo* state, to point out the strengths and weaknesses of these marketing channels and propose possible improvements, specifically for street markets. It was used the conceptual model of service quality SERVQUAL by Parasuraman, Zeithaml and Barry (1985) for the research. The study pointed flaws in the service quality in both retail facilities, highlighting the dimensions of tangibility and reliability. Specifically in the street markets there are deficiencies in factors related to the modernization of equipment, legible written price and legible information about product, orientation to costumers and assurance. Propositions were listed to improve both retail formats, emphasizing the street markes, being able to reverse the degradation process of this relevant retail format.

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RESUMO

Produtos frescos são distribuídos por vários formatos do varejo, tais como: supermercados, feiras livres, varejões e quitandas. A compra desses produtos pelos consumidores depende de vários fatores, como: satisfação com o serviço, qualidade do produto, praticidade, limpeza e higiene do local, proximidade, entre outros fatores. O supermercado tem ocupado o lugar das feiras livres na comercialização de frutas, legumes e verduras (FLV), por razões como conveniência e formas de pagamento. Dessa forma tem-se como objetivo avaliar a qualidade do serviço nas feiras livres e nas seções FLV dos supermercados, na cidade de Tupã, levantar os pontos fracos e fortes desses canais de distribuição, e assim inferir com melhorias necessárias, especificamente para as feiras livres. Foi utilizado o modelo conceitual para avaliação da qualidade dos serviços (SERVQUAL) de Parasuraman, Zeithaml e Barry (1985) para realização desta pesquisa. Observou-se neste estudo que a qualidade em ambos os formatos de varejo é baixa, especificamente nas dimensões de tangibilidade e confiabilidade. Especificamente nas feiras livres, as deficiências maiores são relacionadas à falta de modernização de equipamentos, divulgação de preço e produto ilegíveis, orientação ao consumidor e fatores relacionados à segurança. Proposições foram listadas para melhoria de ambos os formatos do varejo, com ênfase nas feiras livres, para que seja possível reverter o processo de degradação desse formato do varejo.

Keywords: service quality, retails formats, fruits and vegetables, street markets, supermarkets.

Palavras-chave: qualidade de serviço, formatos do varejo, frutas, legumes e verduras, feiras livres e supermercados.

1 INTRODUCTION

Brazil has strong participation in global production of fruits and vegetables (FV). The cultivation of vegetables in the country in 2008 was more than 18 million tons and covered about 800 hectares (RODRIGUES, 2008). Brazil is

the third largest producer of fruit, with a production of 40 million tons per year, but exports only 2%, which demonstrates the strong domestic consumption (ANUÁRIO..., 2010). The southeastern region of Brazil is responsible for approximately 75% of the vegetables production (RODRIGUES, 2008). Specifically in the *São*

Paulo state, in 2010, produced 3,8 million tons of vegetables in a cultivated area of 144.500 hectares, with 55 species (CAMARGO FILHO; OLIVEIRA, 2012). The *São Paulo* state has the largest productive sector of vegetable crops in Brazil, with 23.0% of the production and the main consumer market (22% of the population) (CAMARGO; CAMARGO, 2011).

Although the cultivation of horticultural products is expanding, this sector still faces problems with losses, which started from production to final consumer (VILELA et al., 2003). Such losses confirm that variables such as the unpreparedness of producers, the transport and improper storage and inappropriate handling of fruits for the consumers and vegetables are still major bottlenecks to increase progress for the industry in general.

Brazil is a leading producer of food and also one of the countries most wasteful, in every stages, from planting (20%), transportation and storage (8%), manufacturing (15%), retail (1%), to the handling and preparation at home (20%), so, Brazil wastes 64% of its food from planting to consumption (INSTITUTO BRASILEIRO DE FRUTAS, 2009).

In general, over the past three decades there was not difference in the behavior of the population regarding to the FV consumption.

The Southeast is responsible for almost 60% of the volume of fruit market in the country, followed by the Northeast and South. The northern region is one with the lowest percentage, probably due to the low amount of supply centers (CONSELHO NACIONAL DE SEGURANÇA ALIMENTARE NUTRICIONAL-CONSEA, 2010). One hypothesis of the low FV consumption in this region can be attributed to uneven concentration distribution of these products, with distribution centers away from these places (LAMARCA; VETTORE, 2013). In Brazil, the federal government planned actions to promote the FV consumption, and among them the incentive to consolidate the local street fairs as a tool for improving the selection and purchase of healthy foods and prioritizing the purchase of food for school, and thus to promote the local development (BRASIL, 2009).

The FV marketing is made for some retail formats, such as supermarkets, market street, *varejões*, *sacolões* and *quitandas*. Among these, supermarkets and street markets, are representative in the marketing of these products (MARTINS; MARGARIDO; BUENO, 2007).

At the begining of 1980 the street fairs were still representative in the FV marketing. It changed since 1990. Previous studies suggest some variables that seek to

answer this preference change in buying FV. However, it is known that the service quality is a factor that influences the choice of the purchase place, and possibilities repurchase and customer loyalty.

Thus, this paper aims to evaluate the service quality in the two major format retail, supermarket and street market, and identify strengths and weaknesses in both formats and mainly inferred with proposed improvements to promote the restorations of street markets, which are an important channel for FV marketing products for small farmers.

2 RETAIL FORMATS IN THE FV MARKET

Retail refers to the activities of selling products and services to consumers, either directly or through intermediaries (KOTLER, 1999). In Brasil, the retail formats that sell FV products are supermarket, street market, *varejão/sacolão* and *quitanda*.

- **Supermarket:** the supermarket is the main representative of the self-service establishments, characterized by the choice of products by consumers, which takes up to the cash register, and makes the payment, without interference or help from a clerk (BARROS et al., 1978 apud SILVA et al., 2003). The store size, number of items on display sections, number of output and profit, are factors used to diferenciate hypermarket and supermarket, according to the Associação Brasileira de Supermercados (ASSOCIAÇÃO BRASILEIRA DE SUPERMERCADOS - ABRAS, 2010).

- **Quitanda:** Fixed store retailing, specialized in the distribution of FV product. It is usually small and do not have adequate facilities for the products storage (BARROS et al., 1978 apud SILVA et al., 2003).

- **Street Markets:** the street market uses temporary buildings on public roads (BARROS et al., 1978 apud SILVA et al., 2003). Unlike the supermarket, in the street markets there are greater interaction with the customer, since the whole buying process is done in the presence of the marketer. Also sells fresh products, seafood, crafts and snacks.

- **Sacolão/Varejão:** fruits and vegetables alternative means of distribution. The *varejões* were created by the *São Paulo* state government in the late 1970 with the aim to provide direct marketing from producer to consumer with low price from the poor population (CROCOMO, 1993 apud FONSECA; SILVA; SALAY, 1998). The *sacolões* emerge later, when the Municipal Supply of *São Paulo* (*Secretaria Municipal de Abastecimento de São Paulo*) implemented the *Sacolão* project (CROCOMO,

1993; LIMÕES; LEGASPE, 1992 apud FONSECA; SILVA; SALAY, 1998). The *sacolão* aimed to sell FV products at prices on average 30% lower than the supermarkets and street markets to the poor population. Over the years the *sacolões* and *varejões* did not have their initial proposals. Currently, these stores are private companies without any price control by public agencies. There are various fresh product sold by kilogram single price and also different ways to establish the price.

Among these retail formats, the supermarket and street markets are the main retail formats in the FV marketing. The fruits and vegetables purchase (greens and greenstuff) (FV) among these formats suffered a sharp change in recent decades, according to Household Budget Survey data (*Pesquisa de Orçamento Familiar- POF*) of Fundação Instituto de Pesquisas Econômicas - FIPE (2006). In 1981/82 were purchased by consumers in street markets 92% of fruits, 88% of greenstuff and 82% of the greens. In supermarkets were acquired 5% of fruits, 7% green stuff and 6% greens. In 1998/99 there was an increase in the marketing of these products in supermarkets and a decrease in the street markets. The sale of these products in the street markets were 54% of fruits, 56% green stuff and 62% greens. Fruits in supermarkets represent 33%, green stuff 33% and greens 26%. The retail format profile and the customer habits have changed considerably.

In the 1990s there was a market concentration and the entry of foreign competitors, such as the Portuguese Sonae, the American Wal-Mart and the Dutch Royal Ahold. One reason for the growing involvement of supermarkets in the FV marketing is the time savings and convenience for consumers, who may purchase the various products in one place. Two decades ago, the street market had a bigger representation in the marketing of horticultural products, in second place came the supermarkets. From the nineties, the situation is reversed and the street markets, eventually lost their position to supermarkets. Practicality, business hours and facility of payment, are identified as the main factors that led consumers to change to that retail format.

In a survey conducted by the Ministry of National Integration (*Ministério de Integração Nacional*) (FRUTIFATOS, 2003) it was identified consumption habits and behavior of consumer in the purchase of fruits and vegetables (FV) in the *Minas Gerais* and *Rio de Janeiro* states. It was interviewed 600 consumers in 59 supermarkets. This research showed that 55% of respondents from *Minas Gerais* and 47% from *Rio de Janeiro* prefer supermarkets to make purchases of FV, followed by 24% and 29% of the *Minas Gerais* and *Rio de*

Janeiro in grocery stores, and only 7% and 10% of the *Minas Gerais* e *Rio de Janeiro* in street markets .

The consumers preferences for FV purchases in *Minas Gerais* is in the supermarkets, due to the time of service, cleanliness and hygiene, convenience of payment, customer service and exposition of the product.

Consumers in the *Rio de Janeiro* state attribute the hours of operation, hygiene and cleanliness, payment facility and offers and promotions.

The grocery stores are preferred in comparison to the street markets by consumers of the *Minas Gerais* state, because the price, proximity, variety of products and and promotions. In *Rio de Janeiro* the grocery stores are preferred due to the price, proximity, product appearance and purchase facility. Those who opted for street fairs attribute the appearance of the products and prices (FRUTIFATOS, 2003).

Research conducted in the capital of *Porto Alegre*, *Goiânia*, *Recife* and *São Paulo*, sought to identify the consumers profile who frequently buy food in these retail formats. This research was identified that consumers who buy FV in hypermarkets and supermarkets are characterized by women working outside home (*Recife*), customers with higher income, customers with the highest level of schooling (in *Recife*, *Goiânia* and *São Paulo*) as opposed to street markets in which customers have lower income levels (*Recife* and *Porto Alegre*) (MOURA; SILVA; BATALLA, 2006).

Biscola et al. (2006) sought to identify the benefits and sacrifices in purchasing FV in street markets in the state capital of *Mato Grosso do Sul*. The authors considered two sacrifices aspects, monetary (cash, credit card, trading) and non-monetary (time travel, shopping, waiting, performance, monitoring). While, complaints in terms of sacrifice, of low-income clients concentrate on more basic questions of services provision such as the location and schedules inadequacy, poor quality of some products and even lack of public toilets; complaints from customers with high income are more related to more sophisticated attributes, like the fact of having to carry their own shopping, no credit and debt machines, as well as absence of ATMs available on site. In both cases, we can also attest concerne with the hygiene of the place and the high prices. The variety (efficiency) and quality (excellence) of fruit and vegetables are valued by consumers of two classes.

According to Coutinho, Neves and Silva (2006 apud CAZANE; MACHADO, 2010), the street market is considered an important structure for the food supply of cities, in *São Paulo* state, it promotes the economic and

social development, promoting the economy of cities. It offers fresh products and allows a close relationship among consumers and producers and bargaining power exercised by them. It must be stressed that street market is an important channel for small farmers to the production flow and market access in order to be considered an important distributive policy, enabling the income of the population remaining in the city contributing to its development (SILVESTRE et al., 2006).

These researches show the reasons for the different preferences in the supermarket compared to street market to conduct the FV purchase. From the data mentioned, one can hypothesize that the service quality in supermarkets is higher than the service quality in street markets. However, the service quality is measured by a range of attributes, which go far beyond the factors listed in the research indicated. The service quality ranges from tangible variables, such as facilities, products, equipments, appearance of the attendants until factors related to safety, courtesy, competence and customization.

Because the street market is an important distribution channel of products, specifically for small producers, it is necessary to investigate the service quality in supermarkets and street markets in Brazil in order to respond appropriately to research hypothesis, and so confirm that the service quality in supermarkets is better than the quality of service in street markets, and if so to identify strengths of the supermarkets that may be suitable for the street markets, and propose measures to foster the development of street markets. To achieve the main goal it was used the dimensions of service quality by Parasuraman, Zeithaml and Berry (1985) as follows: tangibility, reliability, responsiveness, assurance and empathy.

3 SERVICE QUALITY

Any firm that fails to worry about the services that accompany their products is liable to have their competitive position threatened. A definition of service given by Rathmell, quoted by Las Casas (1999), is that services can be defined as acts, actions and performance. According to Meirelles (2006) service is the "execution of a job." Service is a process consisting of a set of activities that do not always occur in the interactions between customer and employee service and physical assets or resources which are provided as solutions to customer problems (GRONROOS, 2003).

Service quality can be defined as "the ability of an experience or any other factor has to satisfy a need, solve

a problem or provide benefits to someone". In other words, service quality is the ability to provide satisfaction (LAS CASAS, 1999). Service quality is the degree to which a service meets or exceeds customer expectations. There are four factors that can influence customer expectations: communication by word of mouth, personal needs, past experience and external communication. The perception that the customer has with service consists of two factors: the service and communication sent to the client during or after the process. Identify the criteria by which customers evaluate the services is a way to better understand customer expectations (LOVELOCK; WRIGHT, 2003). And yet, the service quality is a measure of how well the service level reaches the customer expectations (LEWIS; BOOMS, 1983 apud PARASURAMAN; ZEITHAML; BERRY, 1985). The services have two components of quality that must be considered: the service itself and how it is perceived by the client (LAS CASAS, 1999). According Parassuraman, Zeithaml and Berry (1985) service quality involves more than the result, but the manner by which the service runs.

According to Moori, Marcondes and Avila (2002), optimization of customer service is one of the most relevant elements to the organization, but is usually one of the worst management.

The evaluation of service quality, according to Fitzsimmons and Fitzsimmons (2005) emerges through the process of service delivery. Each customer interaction is an opportunity to satisfy him/her, or not. From the comparison among the service effective provision and expectations, the client evaluates the service quality. There are several models for assessing the service quality.

The evaluation model services by Grönroos (1984) supports the theory of consumer behavior, specifically the expectations effects about product performance evaluations after consumption. According to this model, the quality perceived by the customer for the service is done by comparing the expected quality that is formed from the image you have of the service provider, the media and the very need of the customer, with perceived service, formed from the image of the company providing the service through what was offered (technical quality) and how he was offered (functional quality), ie, how the employee performs the task. Thus, the service quality is good when the perceived service quality is better than expected service quality. Therefore, if expectations are too high, the perceived quality is low, even if the perceived service quality is relatively good.

The model by Gummesson (1987) comprises four main components that result in customer perceived quality:

design quality; production quality and delivery quality; relationship quality and technical quality. The first two components are known like sources of quality because the production and delivery refers to how well the elements are produced and delivered against the project. The relation and technical quality, are the result of the production and delivery of product and service. Other variables correlated with this model are expectations, experience and brand image (the product vision that is created in the customers' minds).

Gronroos and Gummesson joined together and created the model by the Grönroos and Gummesson (1988), which demonstrates the quality perceived by the customer according to two components: technical quality and functional and the four sources of quality: design, production, delivery and relationship.

The SERVQUAL model by Parasuraman, Zeithaml and Barry (1985) is a model based on the perceived quality of customer service, and it's given by the difference between expected service and service performance. Thus, quality assessment (Q_i) of a service by customers in relation to a dimension it is made by the difference among its expectation (E_i) and its performance on the P_i , for i dimensions of service quality (equation 1).

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

This model differs from others by addressing gaps in quality and there is a scale developed with attributes relevant for evaluating the services quality. The difference between expectation and performance, besides being a measure of service quality perceived by the customer and also would be a measure of service quality in relation to a specific dimension. The quality dimensions would be generic features of the service, subdivided into items, which together they would result in service as a whole, from the point of view of the customer who will judge him. These items are subdivided into: reliability, responsiveness, competence, accessibility, courtesy, communication, credibility, security, understanding and knowledge of the customer beyond the tangible aspects (facilities, staff appearance, appearance of products, tools and equipment used in the service (PARASURAMAN; ZEITHAML; BARRY, 1985). However, the gap model did not release a tool for measuring service quality. With this objective, Parasuraman, Zeithaml and Barry (1988) presented the SERVQUAL, which arose from a series of qualitative and quantitative studies and resulted in a set of five consistent dimensions mentioned by clients as being fundamental to the service quality.

- Tangibility: facilities, equipment, personnel involved, product appearance, communication material.
- Reliability: ability to perform a promised service reliably and accurately.
- Responsiveness: help the customer and provide prompt service.
- Assurance: ability to convey trust and confidence, courtesy and knowledge.
- Empathy: caring and individualized attention to customers.

Thus, following the model by the Parasuraman, Zeithaml and Barry (1985), when the expected service is higher than the perceived service, the perceived quality is poor and tends to not acceptable. If the expected service is equal the perceived service, perceived quality is satisfactory. And if the perceived service is higher than expectations, the perceived quality is more than satisfactory, tending to optimal quality. According to Johnston and Clark (2002) satisfaction is the result of evaluating a service by the client and can be represented on a continuum ranging from completely satisfied to highly dissatisfied, whose values are arranged in a scale from +5 to -5.

Thus, this study aimed to evaluate the service quality in the street markets and supermarkets in a city of the *São Paulo* state (*Tupã*), using the SERVQUAL model in order to point out its strengths and weaknesses and to suggest improvements. Beside this, this study aims to identify the points could be improved at the street markets, since the decay of this retail format.

4 METHODOLOGY

It used the conceptual model of service quality SERVQUAL by Parasuraman, Zeithaml and Barry (1985) for the survey. It was applied two forms for each respondent, with 23 multiple choice questions each, adjusted to the SERVQUAL model, the first form about expectation and the second form about the performance. In this sense, to measure the quality of service using the SERVQUAL method was calculated the difference between performance and expectation. This way was obtained the gap in the service quality. This difference can be positive or negative. If the difference between performance and expectation is negative, it means the quality is bad, if positive means that the quality exceeds expectations, if zero is satisfactory. Thus, quality assessment (Q_i) of a service by customers in relation to a dimension i was obtained for the difference between their expectation (E_i) and their trial for the service performed P_i , for i dimensions of service quality as expression (1).

The population in the street markets and the supermarkets were considered finite. Thus, considering that the number of inhabitants from *Tupã* (city of *São Paulo* State) with the age above fifteen years old is 51,893 in 2010¹ (FUNDAÇÃO SISTEMA ESTADUAL DE ANÁLISE DE DADOS - SEADE, 2011) for a confidence level of 95.5% and a estimative of error 5%, the sample size was set to 100 guests who attend each of the street markets (it was two street markets) and 100 customers of each of the supermarkets (it was two supermarkets), totaling 200 customers for each of equipments (totaling 400 customers in both of equipments) (MARTINS, 2002).

The sample technique used was probabilistic, to make an inference about the population of people who frequent the supermarket and street markets. The sample is random, systematic and data were collected throughout the period of operation of street market and supermarkets in 24 weeks.

It was applied the SERVQUAL forms with clients about the statements regarding the expected service and performance of the service. The forms had closed questions with the Likert Scale of five points, since (1) strongly disagree until (5) strongly agree. Likert (1932) proposed a sum scale to assess the attitudes of respondents using items on a scale that was five alternative responses, from strongly approve, approve, undecided, do not approve and do not approve strongly. However, in his monograph Likert did not intend to delimit at five points, indicating that could be used various scales. Several studies have been conducted using a variety of scales. According to Masters (1974), from a study using the Likert scale with various numbers of responses (points), noted that the reliability and validity of the surveys are independent of the number of scale points used. Thus, this study used a Likert scale of 5 points instead of 7 points as used by Parasuraman, Zeithaml and Barry (1985).

Thus, using the expression (1) was possible to evaluate the quality of service (total) of the specific dimensions (i) and specific attributes in each dimension. Finally, the data were analyzed using descriptive statistics techniques and inferential statistics (interval estimation), since the estimates were made by value means (averages and percentages) values set using the Likert scale of 5 points. It was made a description and analysis of the data using graphical methods and position measurements.

¹The sample was taken from this age, considering a minimum age of people who buy fresh produce in retail equipment.

5 DISCUSSION OF RESULTS

For data analysis descriptive measures were used, specifically the average, as well as charts of percentages for the perceived quality (ranging from -5 to +5), so it was possible to explain the results and complete the survey properly. The dimensions assessed and their factors, are listed in the Table 1.

The figure 1 show the results obtained in the street markets and supermarkets for the 23 factors used in assessing the service quality. It was noticed that the factors behavior (variables) used to investigate the service quality in both formats were similar, especially regarding to the averages values of them, concentrating below zero, and the values of mode focusing exactly zero. In both cases, supermarkets and street markets, the averages and the modes of the dimensions of service quality were negative. The hypothesis research that the service quality of the supermarket would be better than service quality of the street market, as shown in figure 1, can not be confirmed. In this way, the following topic provides an analysis for each of the dimensions of service quality and their respective factors, making a comparison between the supermarkets and street markets.

5.1 Tangibility

In respect to the variables of tangibility, all of them resulted in negative value to the quality perceived, except for the modernization of equipment in supermarkets had resulted in value zero average and is considered satisfactory (figure 2). The selective collection and modernization of equipment had the greatest differences in the average. These resulted in dissatisfaction in the street markets. In the selective collection case, making an analysis of the percentage of results obtained among the values -5 (totally dissatisfied) to +5 (completely satisfied), in the street markets perceived quality to 76% of respondents was -4, and only 4% considered satisfied, in others words, the clients of street markets evaluated like bad factor, in the case of supermarkets were poorly rated by 38% of customers. The modernization of the equipment was satisfactory for 64.5% of respondents from supermarkets, but for the street markets were considered unsatisfactory (60% of respondents) with an average of approximately -1.

The perceived quality regarding to standardization of bunkers and cleaning site and cleaning tools showed similarity between the street markets and supermarkets, with an average of approximately -2 for first and -1.3 for the second. Despite this result, 50% of supermarket customers were satisfied or quite satisfied with this factor.

TABLE 1 – Dimensions and factors of the service quality in the street markets and supermarkets

	Factors	Average Street Markets ASM	Average Supermarkets AS	Dimensions
1	Selective garbage collection	-3.5	-2.3	Tangibility ASM = -1,71 AS = -1.2
2	Standardization of tents	-1.9	-2	
3	Modernization of equipment	-1.1	0.06	
4	Proper uniforms	-1.3	-0.6	
5	Layout of the establishment considering the type of product	-1.7	-0.8	
6	Cleaning site and cleaning tools	-1.2	-1.3	
7	Remove nonconformity products	-1.3	-1.4	
8	Product availability	-0.3	-1.2	Reliability ASM = -0,95 AS = -1,08
9	Information about the quality of the products	-0.9	-1.6	
10	Quality of products compared other retail format	-0.2	-0.9	
11	Customer compensation for nonconformity products	-0.5	-0.9	
12	Legible written prices	-1.9	-0.7	
13	Legible written name of products	-1.9	-1.2	Responsiveness ASM = -0.9 AS = -0.45
14	Fast service	-0.1	-0.08	
15	Orientation to customers	-0.6	-0.04	
16	Punctuality	-0.41	-1.2	Assurance ASM = -0.85 AS = -0.47
17	Trust on sale of product	-0.5	-0.7	
18	Security in the place of purchase (with respect to other clients)	-0.9	-0.9	
19	Security in the access to the establishment	-0.4	-0.5	
20	Security in the place of purchase (physical facilities, internal vehicles, etc.)	-0.7	0.3	Empathy ASM = -0.01 AS = -0.34
21	Politeness	-0.2	-0.1	
22	Hours convenience	0.2	-0.2	
23	Proactivity	0.04	-0.6	

Source: prepared by the authors

The use of proper uniforms by employees as well as the layout of the establishment in relation to the type of product showed similar results, but that despite the average obtained are negatives, 50% of supermarket customers were satisfied or quite satisfied with this factor.

The Removal of nonconformity products was analyzed by those with a smaller difference between the two devices studied, for which the average were -1.3 and -1.5 for street markets and supermarkets, respectively. The dissatisfaction rate was 71.5% for supermarkets and 57% for the street markets.

In general, for this dimension, both retail formats do not match the needs of users as regard the factors of cleaning and to promote ease in identifying the products by consumers.

5.2 Reliability

The following variables were used to analysis the reliability dimension: availability of products, information about product quality, product quality compared to other equipments, customer compensation for nonconformity products, legible written price and legible written about product information (figure 3).

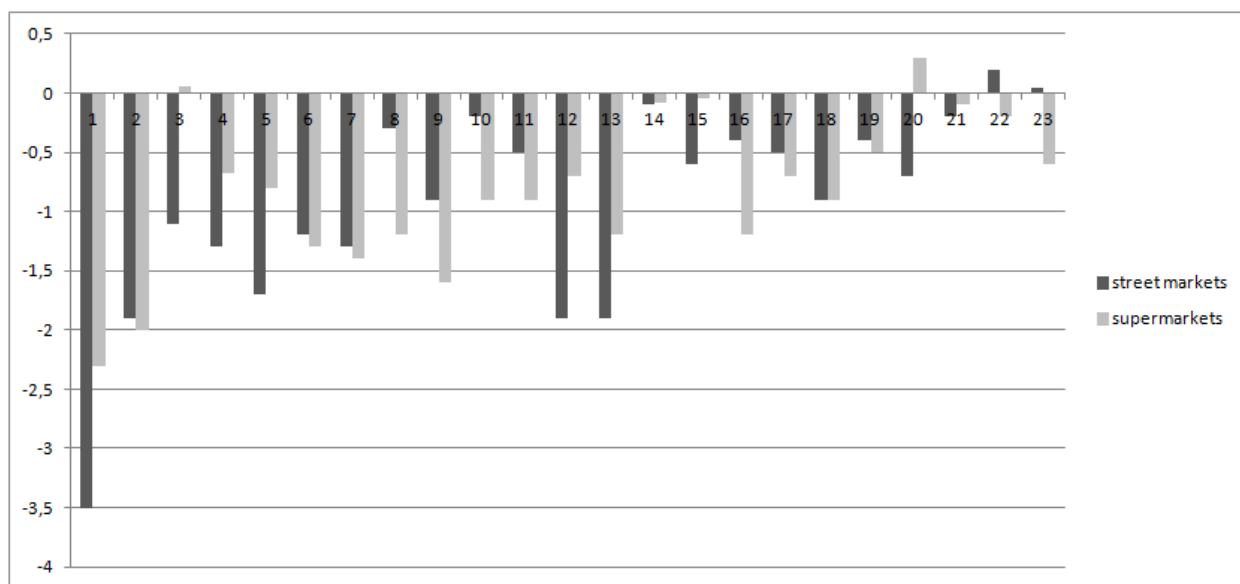


FIGURE 1 – Perceived quality service in supermarkets and street markets

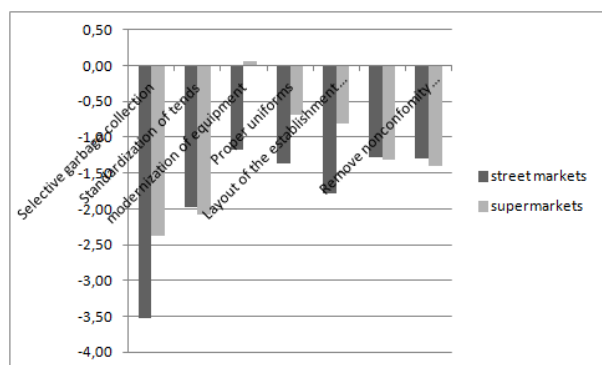


FIGURE 2 – Tangibility

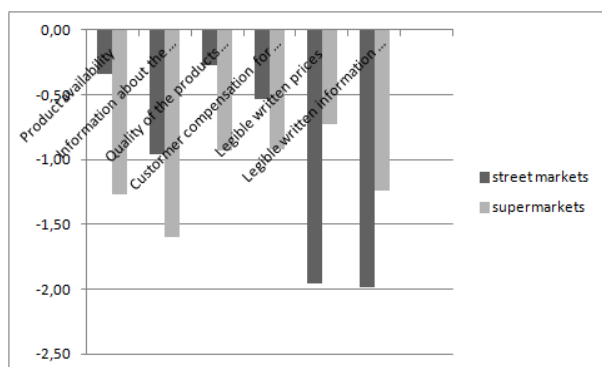


FIGURE 3 – Reliability

The availability of products and information about product quality, as well as compensation for nonconformity products had average value approximately equal zero and -1, respectively, for street markets and supermarkets, which indicates that the service quality in street markets were satisfactory and in the case of supermarkets showed a little dissatisfaction.

Customers of the street markets were dissatisfied with the unreadable written prices and information regarding the products. For these variables, the supermarkets obtained 59% and 54% of satisfaction, respectively, while those of the street markets were only 19% and 25% of satisfaction.

The availability of information about the quality of the product was poorly assessed with an average about -1 to -1.6 for street markets and supermarkets.

5.3 Responsiveness

The responsiveness analysis took into account the following variables: fast service, punctuality and orientation to the customer (figure 4). All of them resulted in negative average values for perceived quality, but had average scores closer to zero. The level that stood out negatively was the punctuality in supermarkets, for which the average was -1.2 against -0.4 in the street markets. The punctuality factor was better evaluated by consumers of street market, for which the perceived quality was satisfactory or more than satisfactory to 63% of respondents and for the supermarkets 41%.

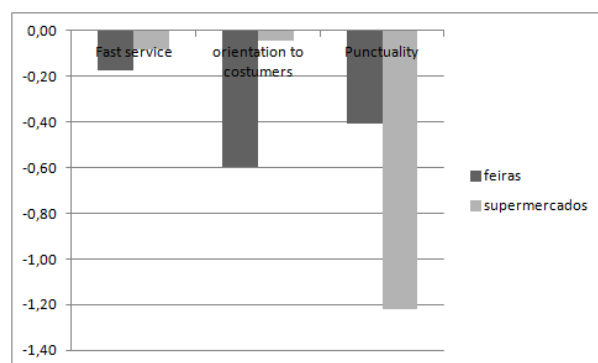


FIGURE 4 – Responsiveness

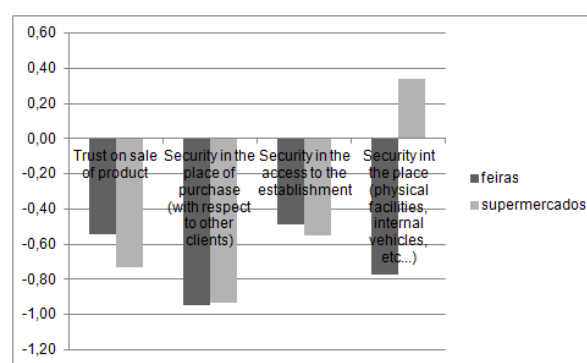


FIGURE 5 - Assurance

5.4 Assurance

The factors used to analyze this dimension were: assurance on sale of product, safety in the place of purchase (compared to the other customers), security in the access to establishment and security in the place of purchase (physical facilities, internal vehicles, etc.) (figure 5). Almost all variables showed similar results, except for physical security for their facilities and vehicle traffic in the place of purchase, which had a positive average for supermarkets (+ 0.34) and negative average for the street markets (- 0, 77). These numbers can be evidenced by the percentage of satisfaction, which were 54% for the street markets versus 91.5% for the supermarkets.

Analyzing the results obtained by average of percentages from - 5 to + 5, it was observed that the safety broadcast on sale of product had a higher percentage of satisfied or quite satisfied for the street markets, totaling 63% against 43.5% for the supermarkets. Regarding the security the place of purchase (with respect to the other customers) the difference between the two devices studied was little, and supermarkets had 1.5% more satisfaction than the street markets (53% and 54.5%, respectively).

The safety in the access to place of purchase had a similar assessment for the supermarkets and the street markets, with average equal to -0.55 and -0.49, respectively, indicating almost a satisfaction for both. From the analysis of the percentages obtained from -5 to +5, it was observed that the perceived quality with respect to this factor in the street markets was satisfactory for 73.5% of respondents, joining more than totally satisfied (75% satisfaction) and for the supermarkets were 64% of customers satisfied.

5.5 Empathy

This dimension had negative result but very close to zero and, therefore, it was evaluated the factors separately showing that the perceived quality was satisfactory. The variables politeness, convenience of schedules and proactivity were the basis for the empathy analysis (Figure 6).

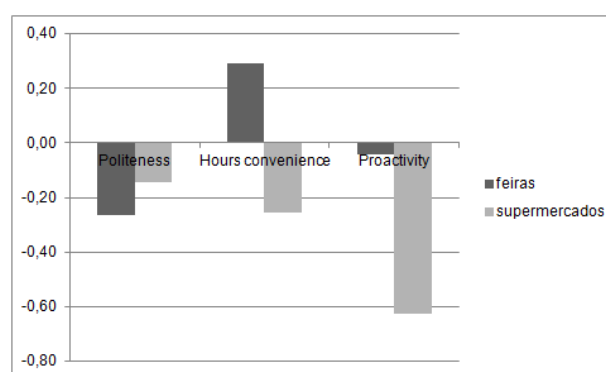


FIGURE 6 – Empathy

Opposed to other variables, empathy showed great disparity among the factors. Among them, the best valued was schedules convenience, which had positive average for the street markets. Analyzing the percentage of results obtained from -5 to +5, it was observed that 87.5% of customers in the street markets are satisfied with this factor and in supermarkets were 72% of satisfaction.

The politeness despite negative results an average was considered satisfactory to 90% of customers in supermarkets and street markets. The same observation is made for proactivity, which showed negative results for

the average in both retail formats. However, analyzing the percentage of results obtained from -5 to +5, 82% of supermarket customers and 61% of street markets customers were satisfied or quite satisfied.

6 DISCUSSION OF RESULTS AND CONCLUDING REMARKS

In general, when comparing the two retail formats, it can be concluded that the perceived quality for both can not be considered satisfactory. The analysis based only on the average did not bring a satisfactory result for some factors and dimensions, being necessary to examine each dimension and its factors, using the percentage of results obtained since -5 (dissatisfaction) to +5 (satisfaction). Thus, it was possible to complement the conclusions, namely:

- On the tangibility dimension, the perceived quality both in the street markets and in supermarkets can be considered poor, mainly emphasizing the lack of garbage collection and collection selective in such retail formats and the lack of removal of the products out of the standards of quality. The only factor well evaluated in this dimension was the modernization of equipments in the supermarkets, since supermarkets have digital scales with price tags, refrigerators and credit card machine, while such equipments are not available on street markets.

- In the reliability dimension, the perceived quality can also be considered low for both retail formats. Highlighted in the street market is the lack of visibility of prices and information about the products because many stalls had no posters or signs stating the price and type of product. The strong point in the street markets is the product quality that customers considered better than in supermarkets and in this outcast, last, the good thing was the visibility of the product price, since they had boards with product type and price. The customers consider the product availability in street markets better than supermarkets, as observed and other researches (BISCOLA et al., 2006; FRUTIFATOS, 2003).

- In the responsiveness dimension, despite the negative results, the factors were very close to zero, and making the analysis of these separately, it can conclude that in both formats the perceived quality of the equipment were satisfactories. However, customers of the supermarket felt that this format was more prepared to guide them in choosing the best products. This result was unexpected, because there was an expectative that the proximity between customer and retail dealer in this equipment is much higher than in the supermarket, which could provide more contact between them. The low satisfaction on punctuality

dimension at supermarket probably is related to the FV section is not ready when the store opens.

- In the assurance dimension, there was also a little bad rating on perceived quality. For the street markets, the main negative factor was the security in the place in respect the physical facilities and internal vehicles. This result was expected, since vehicles moving within markets, such as bicycles, for example. For supermarkets, this factor was positive, indicating excess of expectation. The association of street marketer should request the city council to put barriers to prevented traffic of vehicles. Currently access of vehicles is still easier, because there are only signs. The municipal government should also provide traffic officers for inspection of the vehicles in these locations.

- In the empathy dimension, the street had a better evaluation of perceived quality, being satisfactory to their customers. For supermarkets, this dimension was not considered critical and was considered satisfactory too.

In a general assessment, quality of service in the supermarket sector FV was a little better when compared to the street market. However, it was also possible to identify, through the dimensions and their factors, barriers that exist in the service quality that need improvements, mainly to street marketers. In both formats, attention should be given to factors related to the tangibility and reliability that had bad reviews.

Despite the low perception about the service quality in both retail formats, the vast majority of consumers purchases FV in supermarkets, probably because of the convenience to acquire other products and also for the payment facilities using credit card and postdated checks. However, thinking about to street markets development, improving the service quality could be able to increase the frequency of this retail format. Small actions could be taken in the street markets, for example, adoption of waste containers for selective collection and acquisition of electronic scales for weight the products. The merchants use cards of paper or cardboard to mark up the price of the product, using pens, resulting in irregular letters. For a better standart and visibility of product prices and information of the same points of sale, the street marketers could use panels with loose letters to mark the name and price of the product. To improve the products identification is suggested that the stalls of products be identified with different colors (according to the category of products in both retail formats) and also supply fresh products and remove the non-compliant products.

The dimensions of empathy and responsiveness for both cases proved to be satisfactory, implying that,

regarding to how the service was performed satisfies the needs of customers. The results showed that supermarkets were more prepared to guide customers to purchase the products. Despite the street markets have greater contact between customer and attendant this advantage is not being explored for this retail format. The conscientization of the street marketers to guide the consumers in the purchases should be encouraged by the street marketers association. They should think and act jointly and not as competitors.

The evaluation showed that there were not observed over expectations in the dimensions and the factors in the service quality, with rare exceptions, what showed that many improvements need to be done on both retail formats to achieve competitive advantage, mainly in street markets. These actions, public or private interventions, could promote the strengthening of street markets, which is an important channel for marketing of products for small farmers. However, it is also necessary that the street marketers change to serve its customers offering not only quality products, but quality service too.

As reported studies (BISCOLA et al., 2006; MOURA; SILVA; BATALHA, 2006); customers with higher purchasing power are directing their FV purchases to supermarkets and hypermarkets due to the absence of some facilities, like credit card machines, as well as ATMs at street markets.

It is necessary to change the image of the street markets, as a place with a lot of noise, disorganized and dirty, for finally makes this more attractive retail format to meet the needs of nowadays consumers, seeking a safe environment, nice and modern (practicality to perform the purchase).

The street marketers, through sector representative organizations, such as associations, should require improvements in infrastructure to adapt their facilities in municipal governments. It does not intend to suggest here that the governmental agencies interfere in the sector, as it did in the past by controlling prices to ensure the survival of small farmers and low price for the poor population, but to provide suitable conditions on public roads so that this important retail format continues to exist, since it is a source of income for many small farmers and for most of them the only channel for their product distribution. Specifically at *Tupã* city, where the study was conducted, after this research some actions have been initiated to attract the public to street markets, such as categorization of spaces as the product marketed (only food court) and improvements in infrastructure (covered areas and dumps).

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