

QUALIDADE EM SERVIÇOS: UMA ANÁLISE BIBLIOMÉTRICA

QUALITY IN SERVICES: A BIBLIOMETRIC ANALYSIS

CALIDAD EN LOS SERVICIOS: UN ANÁLISIS BIBLIOMÉTRICO

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RESUMO

Fatores como competitividade, sobrevivência e inovação levam as organizações a buscar qualidade em seus processos, na busca de entregar produtos que atendem às expectativas do cliente. Preocupações sobre formas de mensurar tal atributo, especialmente na literatura sobre serviços, são frequentes. O objetivo desta pesquisa foi delimitar, explorar e categorizar o aparato teórico intelectual que sustenta o campo (base intelectual), a partir do tópico qualidade em serviços através de uma análise bibliométrica. Os resultados demonstram duas redes conectadas, a primeira centrada no estudo de Cronin e Taylor (1992) e outra em Parasuraman, Zeithaml e Malhotra (2005). A análise da primeira rede permite identificar um campo formado inicialmente por debates que surgem em torno das ferramentas de mensuração da qualidade do serviço. A categorização dos estudos de acordo com seus contextos / objetivos permite classificá-los como: Defensores, oponentes, orientadores e visionários; mostrando a evolução do campo e um discurso em torno do Servqual.

Palavras-chave: Qualidade; Servqual; Análise bibliométrica.

ABSTRACT

Factors such as competitiveness, survival and innovation lead organizations to seek quality in their processes, seeking to deliver products that meet the customer expectations. Concerns about ways of to measure this attribute, especially in the service literature, are frequent. The aim of this research was to delimit, to explore and categorize the intellectual theoretical apparatus that supports the field (intellectual basis), from the topic of quality in services through a bibliometric analysis. The results demonstrate two connected networks, the first one centered in the study of Cronin and Taylor (1992) and other on Parasuraman, Zeithaml and Malhotra (2005). The analysis of the first network allows identifying a field initially formed by debates that arise around the service quality measurement tools. The categorization of studies according to their contexts/objectives allows classifying them as: *Defenders, opponents, guiding and visionaries*; showing the evolution of the field and a discourse around the Servqual.

Keywords: Quality; Services; Servqual; Bibliometric analysis.

RESUMEN

Factores como la competitividad, la supervivencia y la innovación llevan a las organizaciones a buscar calidad en sus procesos, en la búsqueda de productos que satisfagan las expectativas del cliente. Las preocupaciones sobre las formas de medir, especialmente en la literatura del servicio, son frecuentes. El objetivo de esta investigación fue delimitar, explorar y categorizar el aparato teórico intelectual que sustenta el campo (base intelectual), desde el tema de la calidad en los servicios a través de un análisis bibliométrico. Los resultados demuestran dos redes conectadas, la primera centrada en el estudio de Cronin y Taylor (1992) y otra en Parasuraman, Zeithaml y Malhotra (2005). El análisis de la primera red permite identificar un campo formado inicialmente por debates que surgen en torno a las herramientas de medición de la calidad del servicio. La categorización de los estudios según sus contextos / objetivos permite clasificarlos como: Defensores, opositores, guías y visionarios; mostrando la evolución del campo y un discurso alrededor del Servqual.

Palabras clave: Calidad; Servicios; Servqual; Análisis bibliométrico.



1 INTRODUCTION

Quality in services represents an essential strategy for achieving success and survival in intensely competitive markets (Parasuraman, Zeithaml, & Berry, 1985a), because it's highly related to competitiveness (Machado-da-Silva & Barbosa, 2002). "To be a competitor in a global market, companies should study the performed examples of quality" (Irani, Beskese, & Love, 2004), once the customer becomes increasingly demanding, seeking companies that not only meet their needs, but also exceed their expectations (Fernandes, Sampaio, Sameiro, & Truong, 2017). The field related to quality in services presents seminal works such as those by Cronin, Taylor (1992, 1994) and Parasuraman, Zeithaml and Berry (1985, 1988), specifically directed to the concern with the measurement of this attribute in the sector. The relevance of the Servqual scale remained as the central axis in the path, adding additional concerns related to customer loyalty and loyalty (Miguel-Dávila et al., 2010; Naidoo & Leonard, 2007).

The concept of quality, however, can be classified as adaptive; going from simple standardization to customer focus, permeating aspects related to pleasure, innovation, loyalty and attendance to needs not yet known (Yang, 2017). Such characteristic can be confirmed in the study of (Panzitta et al., 2017), where the authors sought to develop a broad concept of quality for the pharmaceutical industry, based not only on good manufacturing practices but also on the supply of medicines and technical innovation. The concept ended up involving other elements, such as the risk of drug shortages, technology, quality history of the manufacturing organization and regulations that influence the product life cycle

Specifically in services, the quality has received great attention from both researchers and practitioners in the past two decades (Ali & Raza, 2017). Some have focused on bibliometric research on the theme, however, without conducting an in-depth field analysis and its debates. The study of Castro Jr., Silveira-Martins, Deluca, & Rosseto (2013) delimited the state of the art on the theme from 1985 to 2011 and demonstrates the relevance of authors such as Parasuraman, Cronin, Zeithaml and Berry, the SERVQUAL methodology and the predominance of the expectation confirmation theory (ECT) for the area. Services also have a dimension that specifies the instrumental quality of the process. In this way, the quality of services can be understood in terms of their focus: on technical aspects or on people. However, in any case, neither of the two perspectives can be regarded as universally superior, because the guidelines on the topic assigned to the work team impact on the receptivity of the focus to be adopted (Gibson, 2003).

Pereira, Carvalho, & Rotondaro, (2013) used international (1983-2011) and national (1993-2011) bases in their analysis, showing the use of measuring classic tools such SERVQUAL and SERVPERF and the influence of the perspective adopted by total quality management. The evolution of quality models was the subject of Seth, Deshmukh, & Vrat (2005) work. The authors detected the change in the service delivery process, from conventional to information technology (IT)-based services. They also noticed that service measurement depends on its configuration and one of the ingredients to improve it is the clear understanding of its underlying concepts, which in turn makes the theme more complex.

The aim of the present research was to delimit, explore and categorize the intellectual basis of quality in services through bibliometric analysis. The intellectual basis of the field is demonstrated by the cocitation network generated by the selected articles. This study seeks a new look on the formation of the field by reading

and categorizing important studies for the area. In this way, it's demonstrates the importance of seminal authors through the connections in their discourses, showing a logical and continuous path to the theme.

2 METHOD

For the realization of this research, the design defended by Prado et al. (2016) was adopted, directed to bibliometric studies. Thus, the process consisted of five phases, in which the procedures referring the research operation are established, as can be observed in Table 1.

Table 1 - Steps for bibliometric analysis

	Stage	Procedure	Description
1	Research Operation	1.1	Choice of scientific base(s) or journal(s)
		1.2	Delimitation of terms that represent the field
		1.3	Delimitation of other terms for result calculation
2	Search procedures (filters)	2.1	<i>Title</i> (field term) <i>AND</i> topic (guidance)
		2.2	Use of <i>underline</i> : exact expression
		2.3	Filter 1: just delimitations of articles
		2.4	Filter 2: All years
		2.5	Filter 3: All areas
		2.6	Filter 4: All languages
3	Selection procedures (Database)	3.1	Download of references - <i>software EndNote</i>
		3.2	Download of references in spreadsheet format
		3.3	Download of references for use in <i>CiteSpace</i>
		3.4	References organization in <i>EndNote</i>
		3.5	Matrix analysis in spreadsheet organization
		3.6	Data import to software analysis
4	Data adequacy and organization	4.1	Elimination of duplicated articles from the database
		4.2	Articles elimination through brief reading
		4.3	Elimination through terms polysemy analysis
		4.4	Search for full articles in pdf
5	Scientific production analysis	5.1	Temporal tendencies and volume of publication analysis
		5.2	References and most cited articles analysis
		5.3	Country of origin analysis
		5.4	Journal analysis
		5.5	Authorship and co-authorship analysis
		5.6	Publication category (areas) analysis
		5.7	Keyword analysis
		5.8	Description, relation and tendency study

Note: Adapted from Prado et al. (2016)

It's important to emphasize that bibliometric method is articulated for identify, measure and quantify a scientific production in a given field (Chueke & Amatucci, 2022). Bibliometrics can be characterized, therefore, as a type of literature review (Moscardi et al., 2017). "Bibliometric methods reveal great potential for quantitative confirmation of subjectively derived categories in published reviews, as well as for exploring the research landscape and identifying categories". (Zupic & Čater, 2015, p. 457).

Following these principles, the Web of Science (WOS) was base chosen for this research, made in 2016; in which the terms quality and service* were searched in all titles; without year delimitation; thus resulting

10,657 documents. The use of * for trick is recommended by Cardoso & Kato (2015) and aims to find the term and its variations.

The first used filter was the delimitation of areas belonging to the business, through the selection of documents published in: *Management; Business; Business Finance and Economy*, areas specified by the researched base. This action returned 2,200 valid documents. After this step, there were chosen those classified as scientific articles, totaling 1,307 items.

All the studies were transferred to the EndNote desktop software and fully downloaded. Subsequently, all titles and abstracts were read in order to insert in the sample only those that dealt exactly with the proposed theme (quality in services). This process allowed excluding 124 articles, concluding 1,183 documents to perform the research.

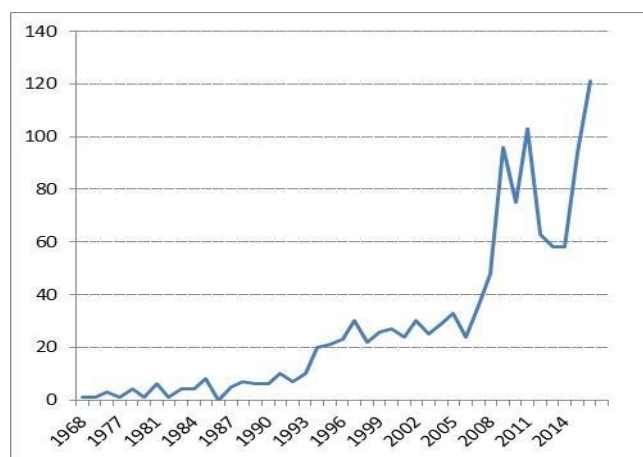
Based on all the information obtained through previous processes, the articles were again identified in the WOS database, although being transferred to Citespace software, a tool that provides bibliometric analysis.

3 RESULTS AND DISCUSSION

3.1 Field configuration

It is possible to obtain a preview of the field configuration and its evolution through observations made via data collected in the WOS. A brief analysis of the publications delimited as a sample for this research allows suggesting a growth of interest in the field, as can be observed in Figure 1:

Figure 1 - Evolution of publications related to the topic quality in services (1968-2016)



Source: Research data

Regarding these data, it is interesting to point out a jump between the years 1968 and 1975, and the year 1986, in which no article was found on the theme. The increasing interest in the area can be observed in the data, especially after the 1980s, the date of the studies resulting from the partnership between Parasuraman, Zeithaml and Berry. There was an intense growth between 2006 and 2009, then resumed in 2015.

Based on the 1,183 articles selected, it is possible to state that the theme quality in services was initially treated in its quantifiable aspect. The first sample study is from Lévy-Lambert (1968). The author argues the influence power of each economic agent (individual or company) in the satisfaction of other involved agents, besides the need of interest in the theme by the economic science. By adopting the concept of quality as one or more characteristics of goods or services that influence income and consumer satisfaction; the author creates a model that considers the influence of the variable "external diseconomies" on the prices of traffic services. External diseconomy would be the effect of individuals or companies on each other.

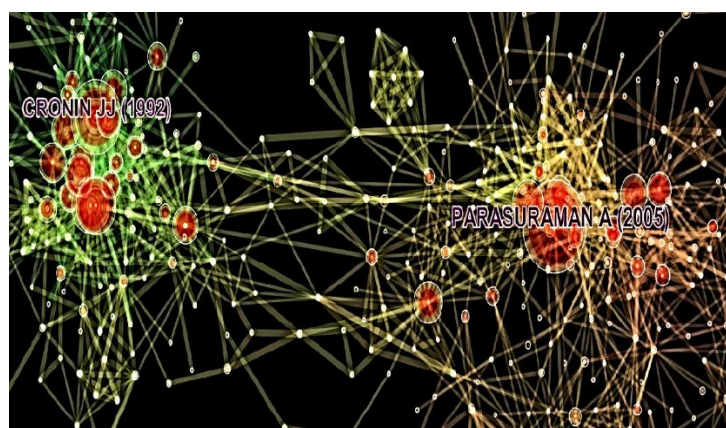
The concern with the way of measuring the quality in services and its relationships with other variables, such as satisfaction, perceived value and behavioral intent are evident.

3.2 Bibliometric analysis

With the studies already included in the Citespace software, it is possible to create a co-citation sample network, which delimits the field, the domain of this knowledge area. According to Chen (2016), the co-citation analysis has its power exemplified in the revelation of global standards as the paths between the limits of a certain discipline or reference groups that demonstrate the relationships between authors and studies. It refers to an analysis centered on the interrelationships established among authors influencing the area and not on their individual publications (Chen, 1999)

Chen (2006) states that the co-citation network represents the intellectual basis of a research front, which is understood as the emergent and transient clustering of underlying research concepts and questions. "A deep feature of a research front is the constant presence of scientific debates, ranging from controversial theories to inconclusive evidence" (Chen, 2003) Therefore, the co-citation network represents what is cited by the research front, or by the state of the art of a given field, as can be observed in the Figure 2.

Figure 2 - Network of co-citations and their delimited burts



Source: Research data.

The analysis process through Citespace software reveals that the intellectual basis of the field of "quality in services" is formed by two main networks strongly tight: the first focused on the study of Cronin & Taylor (1992) and the other in the Parasuraman, Zeithaml, & Malhotra (2005a).

Due to the impossibility of reading all the studies that compose both networks, the delimitation of the “citations burts” or reference peaks of the sample was adopted, representing the circles in Figure 2. Burts are metrics related to the temporality of citations, being able to be understood as a good indicator for the research front of a scientific field or the vanguard of the same (Chen, 2004). Therefore, based on the intellectual base of the field, the articles that showed a high number of citations in a certain period were analyzed. This analysis consisted of the reading of all selected studies and their subsequent classification based on two central categories: the **context/objectives** adopted in the study and its **results**.

The objective was to merge the studies under these two points of view, so that subcategories that reflect the debate and the knowledge generated in the field could be constructed. From this classification, it was possible to include the studies/authors in clusters based on the network and the analyzed context. In the present study, the discussion will be focused on the first network, i.e., the cluster of authors that has the study of Cronin and Taylor (1992) as central.

3.3 Network analysis

According to the identification of studies that show burst or peaks of reference, the first network is composed by older studies: (Parasuraman, Zeithaml, & Berry, 1994; Parasuraman, Zeithaml, & Berry, 1988); Zeithaml, Berry, & Parasuraman, 1996; Parasuraman, Berry, & Zeithaml, 1991; Cronin & Taylor, 1992 ;1994; Babakus & Boller, 1992; Teas, 1993; Brown, Churchill Jr., & Peter, 1993; Carman, 1990). Each point or node of the network represents the citations made by the sample studies and the lines connecting nodes are the co-citation links. When these links are analyzed yearly, it is observed that the connections begun in the year of 1991, being intensified in this network until 2002, when they started dispersing towards the second network.

The reading of all the articles that comprise the first group allows identifying a set of authors with homogeneous characteristics among themselves. Both have a very similar context and are related to the discussion on the SERVQUAL scale defended by Parasuraman et al. (1988). These studies can be understood by their role in the evolution and acceptance of the SERVQUAL scale in the academy. The discussion generally begins with the study that shows the scale, passing through criticisms directed to its conception and presentation, culminating in the call for new directions of research and the attempt to readjust the scale based on the found problems.

3.4 Categorization of the studies

When the studies of this group were analyzed in relation to their **context/objectives**, a broad view was sought on the key questioning of the authors, which almost totally exemplifies the methodological, conceptual and practical concern in relation to the SERVQUAL scale. There is an axis that can be taken as central in these notes, which is the criticism to the paradigm of disconfirmation of expectation (ECT) usage, base of SERVQUAL scale. "Disconfirmation is measured by the difference between performance (what is delivered to the consumer) and expectations (what the consumer expected to find in the consumer experience)" (Urdan & Zuñiga, 2001).

For a better understanding of network formation, the first category of analysis (**context/objectives**) was decomposed into other subcategories that provided a clear view of the debate evolution in the field. Thereby, considering that the central context of the studies is the questioning of SERVQUAL usage as a way of measuring, the studies were subdivided into four subcategories: **1 - Quality is attitude; 2 - In defense of SERVQUAL; 3 - Specific problems; 4 - New directions.**

3.5 Why "quality is attitude"?

Research that fit the first subcategory are those in which the authors defend the quality measurement as a simple performance evaluation of services and not the difference between expectations and performance, i.e., they are studies that challenge the ECT.

The studies of Cronin and Taylor (1992) and Cronin & Taylor (1994) represent this profile, since they reflect the need of separation between the quality and satisfaction concepts, being that the latter acts as a mediator, changing expectations and evaluations about a given service (Cronin and Taylor, 1992). The authors argue that judging satisfaction and judging quality are different processes, and that the great issue is that the SERVQUAL scale was shaped by the ambiguity of both concepts. For the authors, the ECT depends on the customer's prior experience with the service to be evaluated whereas the attitude analysis does not (Cronin and Taylor, 1994).

Based on these criticisms to SERVQUAL and its way of measuring, the authors then advocate a new way of measuring quality, specifically termed SERVPERF. For this reason, the studies of Cronin and Taylor (1992 and 1994) are named "opponents"; i.e., they question the ECT usage adopted in SERVQUAL for measuring quality in services.

3.6 In defense of SERVQUAL

The second subcategory originated from the analysis of the context/objectives of the studies is called "in defense of SERVQUAL", since it shows authors who support the instrument. In this cluster are included the studies performed by the collaboration between Parasuraman, Zeithaml and Berry (1988; 1991 and 1994). In the first, the SERVQUAL scale is presented, an instrument of 22 items applied to consumers in five different service sectors, being maintenance and repair of equipment, banks, mobile telephony, insurance brokerage and credit card companies. This approach leads to five dimensions in which services can be evaluated: Tangibility, reliability, understanding, security and empathy.

In the second, the authors respond to the study of Cronin and Taylor (1992), in which criticism is made to scale; and the third (1994) presents a re-evaluation of the scale after numerous evaluations. Based on the statements made by Cronin and Taylor (1992), (Parasuraman et al., 1994) manifested assuming that quality can be measured by several standards of comparison, being GAP expectations - performance (or ECT) one of them. However, in 1991, the authors seek to refine the scale in the face of numerous problems pointed out by other studies, especially those related to statistical validity to application sectors and to way of writing.

They chose to name these studies as "defenders", since they advocate in favor of the SERVQUAL scale and its principles, i.e., the way of measuring based on the ECT.

3.7 SERVQUAL: problems beyond foundations

The third subcategory is called Specific problems and has the articles of Babakus and Boller (1992), Teas (1993), Brown et al. (1993) and Carman (1990) in its scope. These authors do not have only the criticism to the ECT in their objectives, but also the analysis of specific problems in relation to the application of the SERVQUAL scale, especially those related to statistical analyses and other points, as can be observed in Table 2:

Table 2 - Problems related to Servqual and its authors

Problems of SERVQUAL scale	Authors
Dimensionality and stability of dimensions found in the application of scale	Babakus and Boller (1992); Carman (1990); (Brown et al., 1993)
Viability to find quality as a gap between expectations and performance (expectation confirmation theory)	Babakus and Boller (1992); Carman (1990)
Effect of writing on the quality of answer	Babakus and Boller (1992); Carman (1990)
Reliability and validity (statistics)	Babakus and Boller (1992); (Brown et al., 1993)
The concept of expectations is vague	Teas (1993)
Adopt the difference of scores as a way of measuring	(Brown et al., 1993)
Restriction of variance	(Brown et al., 1993)
Application to services with multiple encounters (e.g. hospitals).	Carman (1990)
How/when to obtain information on the expectations	Carman (1990)
Importance of each evaluated item to the consumer	Carman (1990)

Source: Research data.

The studies listed in this table are called "Guiding", since they aimed at alerting to numerous difficulties related to scale and its application. In general, there is a strong concern with dimensionality, with stability and the statistical validity of the same. There is no consensus on the number of dimensions related to scale analysis (Babakus and Boller, 1992). Moreover, validity and other statistical measures, such as discriminant analysis, are also questioned.

Another important point is the way the variables are written, which causes problems related to errors by the respondents. Furthermore, Carman (1990) also draws attention to the application of scale in services that are multiple (such as those practiced in health organizations), since they are composed of multiple encounters (reception, doctors, nurses, physiotherapists, professionals in diagnosis and therapy, among others.). It is impossible to evaluate different encounters by adopting them as one and with only one tool. Gathering expectations is also a challenge, according to the same author. It is necessary to understand the importance level of each item of the consumer scale, i.e., which affects its evaluation, in each measured variable.

3.8 The field and it's new directions

The fourth and last subcategory identified through the context/objective analysis of articles is named as "New directions". It concentrates the studies that argue that discussion should be taken to another level and not only focus on the problems found in the use of SERVQUAL and ECT. It is based only on the research of Zeithaml, Parasuraman and Berry (1996), in which the authors present a new model for measuring quality in services, being therefore named "Visionary". In this study, the authors consider the impact of quality on positive behavioral intentions by the consumer, i.e., rather than measuring, it is also necessary to understand how the perception of quality is related to other factors, such as profit.

It is realized that the debate in the field begins to open up to new perspectives, other looks on how measuring the quality of services, carrying the need to also evaluate the effects of this variable on important organizational aspects.

4 FINAL CONSIDERATIONS

Based on the first characterization, the network articles will now be classified according to their results. The reading and subsequent organization of articles allowed generating two subcategories: "Scale" and "Agenda/Suggestions".

The first subcategory includes articles that present in their results some way of measuring quality in services (scale) or even statements on the application of these tools. The study of Cronin and Taylor (1992) with the proposal of SERVPERF and Parasuraman is based on this profile, and Zeithaml and Berry (1988) with SERVQUAL. This subcategory also includes the studies of Teas (1993), Zeithaml, Parasuraman and Berry (1996) and Parasuraman, Berry and Zeithaml (1991).

The study of Teas (1993) resumes SERVPERF in its conclusion, proving the superiority (in terms of construct validity) of the measurement based directly on the performance evaluation of the service rendered, in contrast to the measuring based on the ECT, despite alerting for caution on the subject.

The study of Zeithaml, Parasuraman and Berry (1996) shows in its conclusions the impact of the quality on the consumer's behavior and intention of purchase, demonstrating that the quality is positively associated to this variable. The authors also analyze the customers who have faced some problem in the process of services rendered, reaching two important positions: 1 - Those clients who did not face problems in the process showed higher levels of intention to fidelity; 2 - The improvement in quality does not restore intentions, i.e., once it has gone through mishaps in the process, the effort does not compensate the negative effect.

The study of Parasuraman, Berry and Zeithaml (1991) also fits the subcategory "Scale". in which the authors strive to realign the SERVQUAL scale in view of the several received criticisms. Thereby, they test and change the scale in order to improve the cohesion among the items in each evaluated dimension, change the way of writing, insert variables related to employee knowledge and material appearance, besides another one that measure the importance of each dimension.

The issue of the number of dimensions or factors is central to the discussion, since it represents a strong point in the discussion and criticism about the scale, as can be shown in Table 2. The authors review the analyses and achieve six factors unlike the five proposed in the presentation of the scale. The tangible dimension has four

factors that are broken into two, forming another dimension at the same time that responsiveness and the guarantee were in the same factor, being therefore different dimensions of quality.

Another important advancement point in the field is that the authors finally admit that SERVQUAL can be understood like a "skeleton" or basis for the analysis of quality in services and that an adequacy to the environment or context can be used in order to supplement the instrument.

The studies that have their results focused on the presentation of suggestions or the creation of a research agenda are in the subcategory "Agenda/Suggestions": Parasuraman, Zeithaml and Berry (1994); Cronin and Taylor (1994); Babakus and Boller (1992); Brown, Churchill Jr. and Peter (1993), and Carman (1990).

The study of Parasuraman, Zeithaml and Berry (1994), as cited above, deals with a response to that of Cronin and Taylor (1992). However, although the authors defend the SERVQUAL scale, they do not postulate it as the best tool for measuring quality in services, seeking for the use of other scales, by the analysis of interrelationships among the constructs and by the attempt of other ways of classification of these constructs (and not only by the factor analysis). The major contribution of the article, however, is focused on the understanding that an overall evaluation of quality in services depends on satisfaction with certain transactions and these, in turn, depend on the evaluation of specific components, such as quality of service, product and price.

Cronin and Taylor (1994) maintain in their conclusions the opposite position to the ECT usage, defending the model based on the consumer perception in relation to the quality. Their suggestions involve attention in relation to the variation in the factor structure (which occurs in both scales). Researchers should previously evaluate the structure in order to understand whether the five dimensions of scale are applicable to their study. Moreover, they emphasize that there is no consensus (which is needed) on what would be the domains of the concepts of quality, satisfaction, disconfirmation, expectation and value of a service.

Babakus and Boller (1992) also demonstrate the failure of the factor structure, stating in their results that the five dimensions proposed by SERVQUAL are not valid for all services, being influenced by the way the items are drafted. The authors postulate that the number of quality dimensions can be understood according to the analyzed type of service, corroborating with Carman (1990). Through his study, Carman shows conclusions related to the approach of several problems referring to SERVQUAL. For him, it is necessary to understand the complexity level represented by the activity of collecting information about the customer expectations, since, for valid data, it is necessary to analyze the prior consumer experience and his or her familiarity with the service.

The last study of this subcategory (Agenda/Suggestions) is of Brown, Churchill Jr. and Peter (1993). These authors also question in their results the five factors of SERVQUAL, stating that another critical point in the scale application lies in the absence of normal data distribution; precluding totally the statistical tests. They state that the context (type of service) influences the application and identification of these factors and, for this reason, the scale should be adapted to the research reality.

The results and choices generally related to the application of measurement tools depend on the evaluated scenario, the number of dimensions resulting from the analysis, and what could and should be changed in the spelling of each item measured in the scale. For multiple services, it is necessary that the quality be measured in each function and not in general, besides being necessary the collection of a variable that shows the importance of the evaluated item for that customer. All these issues permeate the first field network, drawing attention to the discussion related to the evolution of the area.

4 CONCLUSIONS AND LIMITATIONS OF THE STUDY

The aim of the present study was to delimit, explore and characterize the intellectual basis of quality in services through bibliometric analysis. The results demonstrate two merged networks, being one centered in the study of Cronin and Taylor (1992) and another in the one of Parasuraman, Zeithaml and Malhotra (2005).

An analysis of the first network allows stating that the field on the topic of quality in services was based initially on a debate centered on the measurement of this variable and on the theoretical basis for its accomplishment. The discourse focuses on the limits of the ECT usage and hence of the SERVQUAL scale until the change to concern with the relationship between the quality and other factors. The entire process allowed identifying and characterizing the studies that comprise the first network, which can be classified in defenders (of SERVQUAL); Opponents (questioners of the ECT); Guiding (dedicated to the examination of problems related to the application of SERVQUAL) and Visionary (study that opens the field to new perspectives).

It is believed that a limitation of this study lies in the use of only one research base (WOS). However, it is justified since this is the only one hitherto to make connection with the tool used for analysis (Citespace).

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