

## Development and testing of a scale for assessing the quality perceived by consumers of pay-tv services

### Desenvolvimento e teste de uma escala para avaliação da qualidade percebida pelos consumidores de serviços de TV por assinatura

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#### ABSTRACT

The present article has like developing main objective and testing a scale for the evaluation of the total quality realized by the consumers regarding the services given by the operators of TV by signature who act in the city of Belo Horizonte, MG. To reach the objective quoted the approach methodology it unfolded in two phases: in the first one, a study was carried out exploratory of qualitative nature; on Monday, one opted for the realization of a quantitative descriptive concluding inquiry. In the first phase interviews were carried out in depth with sellers and consumers, which favored the identification of variables that let support to the initial construction of the model and of the hypotheses be tested in the next phase that, for his time, was concluding and descriptive. The cut was a cross only one, wrapping a study of the type survey, with use of structured questionnaire that turned in the collection of 431 valid cases, subsequently treated by statistical processes of multivariate analyses when is used for such the Modeling of Structural Equations (SEM). The obtained results allowed concluding that the quality realized by the consumers regarding the given services is a construct multidimensional. The developed scale presented appropriate levels of reliability and convergent and discriminating validity.

**KEYWORDS:** Perceived quality; Satisfaction; Attitudes and behavioral intentions; Pay-TV; Modeling of Structural Equations.

#### RESUMO

O presente artigo tem como objetivo principal desenvolver e testar uma escala para a avaliação da qualidade total percebida pelos consumidores em relação aos serviços prestados pelas operadoras de TV por assinatura que atuam na cidade de Belo Horizonte, MG. Para atingir o objetivo citado a abordagem metodológica desdobrou-se em duas fases: na primeira, foi realizado um estudo exploratório de natureza qualitativa; na segunda, optou-se pela realização de uma pesquisa conclusiva descritiva quantitativa. Na primeira fase foram realizadas entrevistas em profundidade com vendedores e consumidores, o que propiciou a identificação de variáveis que deram apoio à construção inicial do modelo e das hipóteses a serem testadas na fase seguinte que, por sua vez, foi conclusiva e descritiva. O corte foi transversal único, envolvendo um estudo do tipo *survey*, com uso de questionário estruturado que resultou na coleta de 431 casos válidos, posteriormente tratados por processos estatísticos de análises multivariadas utilizando-se para tal a Modelagem de Equações Estruturais (SEM). Os resultados obtidos permitiram concluir que a qualidade percebida pelos consumidores com relação aos serviços prestados é um construto multidimensional. A escala desenvolvida apresentou níveis adequados de confiabilidade e validade convergente e discriminante.

**PALAVRAS-CHAVE:** Qualidade percebida; Satisfação; Atitudes e intenções comportamentais; Serviços de TV por assinatura; Modelagem de Equações Estruturais.

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## 1 INTRODUCTION

The human being presents a series of necessities organized in accordance with a hierarchy of values, as proposal for Maslow (1954). According to classification, it can be cited the social necessities, such as leisure, entertainment and information (Vidrik, 2006). In this context, the television comes featuring its importance and value when the completion a considerable part of the dedicated time to the entertainment and information of the majority of the modern populations, amongst the most varied potential purposes of this way with society (Marques, 2005).

The pay-tv is presented as a new logic in the relation of the spectator with the way, based on the payment for the access to the television with better quality of signal and offers of programming diversified with great variety of canals that includes diverse niches of interest of the consumer, such as: musical news, interviews, films, sets of documents, varieties, events, sports, culinary art, religious, canals of sales, among others (Torres, 2005).

The TV for signature was initiated in the United States in the years of 1940, having as purpose to improve the reception of the open signal of TV that was received for small communities of the interior. Similar fact occurred in Brazil in 1958, in the city of Petrópolis, Rio de Janeiro, also with focuses to improve the quality of the signal of reception of the open TV and gained force in 1971 (Globosat, 2011). The agreed use of new technologies made possible the sprouting of the nets and the operators of pay-tv, with canals that had started to reach, in simultaneous way, different places (Hoineff, 1991), taking the market of pay-tv to a sped up growth in recent years, benefiting to the customer with the increase it number of operators, providing to choose the company who will go to give the service, beyond new options of signatures with aggregates, as, for example, telephone and the internet broad band (Fonseca, 2010).

The incited competition enters the operating companies in the market of TV for signature in Brazil has presented challenges for the operators, such as: to know the behavior of the consumer, to search new customers, to loyalty the subscribers and to diminish the problems in the attendance. These challenges originate due to high speed with that the behavior models are modified, demanding standards of quality more and more raised on the part of the companies of this market (Tamashiro, Silva, Patino & Paschoal, 2007).

Being based on the Brazilian market of TV for signature this scene one does not become different, mainly, due to the fact of that a lack of specific scales in the evaluation of the perceived quality of the services offered to these consumers exists (Mídia Fatos, 2014). More over, the current scales little are explored as for the evaluation of the impacts of the quality perceived on the satisfaction, the perceived value, the repentance, the confidence, the mouth-to-mouth propensity to loyalty and communication (recommendation).

Thus, the identification of the attributes of the quality of the services offered for the operators of TV for signature under the vision of its customers, its satisfaction in respect to the same, beyond the impact of these concepts, had constructed the object of central study of this research, that was developed in Brazil, where the TV for signature is a media of mass that reaches consumers of all the social classes, but that, at the same time, it preserves all the qualities taken possible for its high segmentation and technological innovations.

Data of the ANATEL show that, in Brazil, the domiciles subscribers come close quickly to the 20 million, reaching a number next to 60 million people. Beyond extending the base of subscribers, the viewer is more faithful: in 2001, share of pay-tv in the noble schedule was of 24% e, in the total of day, 27%. Currently, the index arrives at 26% in the noble schedule and 29% in the total of the day (Mídia Fatos, 2014).

The problem of the present research is based on the fact on that the maintenance of customers in operators of pay-tv depends on the quality perception that they possess in respect to the given services, as well as of its behavioral attitudes and intentions. The general aim consists to develop and to test a scale for the evaluation of the quality perceived for the consumers of pay-tv. More specifically, one

will search: (a) To identify qualitatively which are the attributes of quality perceived by the customers of services of pay-tv; (b) To evaluate the perception of the quality of subscribers of pay-tv in respect to the services offered for the operating operators in Belo Horizonte, MG; (c) To identify the satisfaction of the subscribers in respect to the operators of pay-tv of Belo Horizonte, MG; (d) To identify to the attitudes and behavioral intentions of customers in respect to the operators of pay-tv, with emphasis for the constructs following: propensity to loyalty, mouth-to-mouth pride and communication/recommendation.

## 2 THEORETICAL BASIS

The behavior of the consumer is susceptible the modifications, therefore the customers are displayed to the changes that occur in environments: socially, technological, politician, economic and cultural, creating in the market new trends, forcing the organizations to be adapted, constantly, to this reality (Souki, Gonçalves, & Silva, 2006). These changes are capable more and more to provide to the consumer biggest accessibility to information, returning it judicious and critical in its choices. Moreover, this new profile of the consumer is very demanding, increasing more and more, in aspects related to the quality of the services that the companies offer to the market (Kotler & Keller, 2006; Cobra & Brezzo, 2010).

To know the behavior of the consumer, to understand its desires and expectations, becomes indispensable for the success of a company, therefore such knowledge can be the secret so that companies acquire competitive advantage, beyond more offering the possibility of instalment of an adjusted service (Blackwell, Miniard & Engel, 2013).

A great variety of authors highlights the importance of the services as an element capable to generate sustainable competitive differential for the companies. Once, the consumer does not obtain to differentiate the product easily enters the excessively competing ones of market, the key for the competitive success can be in the aggregation of services that are valued for the consumers (Parasuraman, Zeithaml, & Berry, 1988; Bateson & Hoffman, 2001; Kotler & Keller, 2006). However, although the importance of the sector of services, the customers not always are satisfied with the quality and the value that receive what it can compromise its behavioral attitudes and intentions in respect to the supplier. According to Zeithaml (1988) and Ha and Jang (2010), the satisfaction of the customer in respect to a product or service is influenced in significant way for the evaluation that the consumer makes of its characteristics.

In accordance with Zulzke (1997), the concept of a service or a company, is constructed of gradually form, for proper experimentations of the consumers, information that are transmitted, mouth-to-mouth commentaries of the users, for the attitudes in the act of the sales, for competitors, advertising, etc. Of certain way, consumers always will go will comment its positive or negative experiences concerning the services.

The quality in service can be understood as a type of attitude that results of the comparison enters the expectations of the consumer and its perception of the received service (Sales, 2006). Thus, a satisfactory experience can take the customer the new acquisitions, what it raises the concern for the companies in respect to the quality of the service that delivers (Kotler & Armstrong, 2006).

Authors Parasuraman, Zeithaml and Berry (1988) still more describe a difficulty associated in the quality mensuration involving the rendering of services, once, they are given concomitantly to its "consumption".

In turn, the quality can be understood as a predecessor of the satisfaction. Therefore, it is a central element in the business strategies (Golder, Miter, & Moorman, 2012). In accordance with Anderson, Fornell and Lehmann (1994) the perceived quality can be defined as the judgements of the consumer on the excellency or total superiority of the product or service. Tamashiro, Silva, Patino & Paschoal (2007) stand out that the quality is a factor of extreme importance for the organizations, therefore reflect in significant way its power of competitiveness and support. If the quality is a factor guaranteed for the organization to its consumers, the positive impacts will reflect directly in "loyalty to the mark,

mouth-to-mouth communication, profitability and participation in the market” (Tamashiro et al., p. 20).

The importance of the satisfaction is related with the generation of profits by means of the accomplishment of the necessities and desires of the consumers (Churchill & Surprenant, 1982). Oliver (2015) affirms that the satisfaction of the consumer can be capable to interfere with the loyalty that, in turn, can interfere with the components of the satisfaction.

Studies that address the subject of satisfaction and quality of services show that quality precedes satisfaction and that consumers carry out their judgment using as a parameter preexisting expectations (Golder et al., 2012; Parasuraman, Zeithaml, & Berry, 1985).

If the company obtains to guarantee the quality of its services, certainly, the positive impacts will go to reflect directly in “loyalty to the mark, mouth-to-mouth communication, profitability and participation in the market” (Tamashiro et al., 2007).

The perceived value is something that the customer perceives during the process attainment of a good or service with a direct relation between the benefits and sacrifices spent for the acquisition (Ravald & Gronroos, 1996; Sirdeshmukh, Singh, & Sabol, 2002).

Zeithaml (1988) it adds the existence of factors or formers attributes of the value perception for the consumer who, definition, are the benefits and sacrifices front to the acquisition of a product or service and stands out the trend of the highly particular characteristics between the consumers.

The price can be understood as something of which is renounced in the service or a product acquisition of (Bei & Chiao, 2001; Churchill & Peter, 2003; Stanton, Walker, & Etzel, 2001). Already the value perception is a mental choice obtained by the consumer, incurred derivative of a relation between perceived benefits and sacrifices (Mittal, Holbrook, Beatty, Raghurir, & Woodside, 2007).

According to Monroe (1973), the price is one of main the determinative ones for the choice of the products for the purchasers, beyond interfering with the perception of the product quality for the consumers.

The mouth-to-mouth communication is a direct reflex of the consumption experience (Blackwell, Miniard, & Engel, 2013, P. 180). When it is emitted in unfavorable way is more frequent and intense, taking to the loss of several and potential consumers. When it is positive, becomes a critical factor for the success (Kurtz & Kenneth, 1998).

According to Oliver (1997), the aspects of the satisfaction of the consumer are capable to interfere with loyalty and the aspects of loyalty are capable to interfere with the components of the satisfaction. As much the professionals how much the academics understand that the two concepts are on so that it cannot be dissociated, that is, are interlaced elements. However, not always a satisfaction condition will go to express loyalty, despite, the loyal consumers, in its majority, is satisfied customers.

The pride is associated with one of the stages that also compose the levels of loyalty (Costa & Almeida, 2007) and to the meaning of excellency, feeling of personal, brio dignity, high concept of proper itself, aplomb, selfishness in magnificent surplus and (Ferreira, 2004). Pride and aplomb are related with the experimentation of the success, the feeling of “being capable” and are manifested front to a comparison with other individuals from a self-assessment function (Faria, 1998).

## 2.1 THE HYPOTHETICAL MODEL

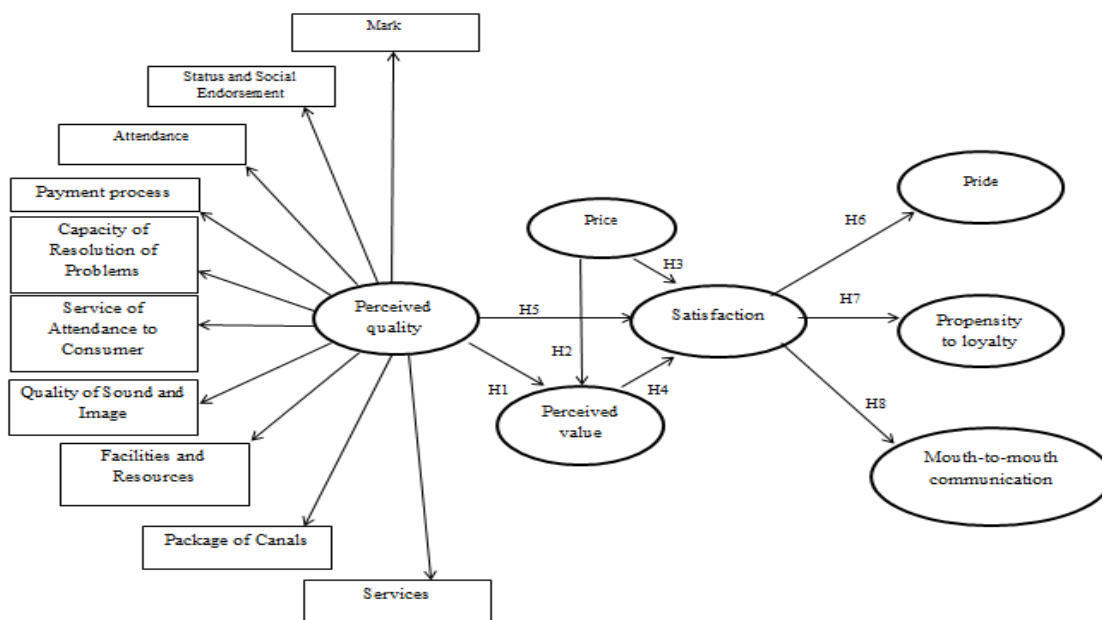
In the proposed model they are presented constructs and indicating related to: Attendance, Payment process, Capacity of Resolution of Problems, Service of Attendance to Consumer (SAC), Technological Quality of Sound and Image, Facilities and Resources, Additional Package of Canals, Services, Mark, Statuses and Social Endorsement that are affected directly by the perceived quality, this, in turn, goes to impacts in the perception of value and the satisfaction of the consumer, that they are, each one, antecedent of the behavioral attitudes, related with the communication mouth-to-mouth, loyalty and pride.

On the basis of the aim, in the context and the theoretical analysis seen until here, Figure 1 shows the Hypothetical Model by which they will be defined and tested the variable to analyze the perception

of the quality of the consumers of the services of pay-tv of Belo Horizonte, MG, as specification to be followed:

- The first hypothesis when testing the model was defined as H1: the perceived quality total presents positive a monotonic relation on the perceived value;
- On the basis of the price concepts, perceived value and satisfaction of this study, two hypotheses of the model were conceived, H2: the price presents positive a monotonic relation on the perceived value and H3: the price presents positive a monotonic relation on the satisfaction;
- In agreement with the theoretical bases presented for perceived value and satisfaction, it emerges the fourth hypothesis, H4: the perceived value presents positive a monotonic relation on the satisfaction;
- In attention to the theoretical bases inherent to the satisfaction and the perceived quality, described previously, it is that the fifth hypothesis is claimed, H5: the perceived quality total presents positive a monotonic relation on the satisfaction;
- The customer who is proud of a accomplished consumption passed for a satisfactory experience conferred by the acquisition in diverse contexts. Therefore, the sixth hypothesis was established, H6: the satisfaction presents positive a monotonic relation on the pride;
- Whereas the above-mentioned theoretical exhibitions presents it seventh hypothesis, H7: the satisfaction presents positive a monotonic relation on the propensity to loyalty;
- When the consumer acquires a good service, generally feels the necessity to share the experience for which he passed (Westbrook, 1987). Thus, therefore, he is established the eighth hypothesis, H8: the satisfaction presents positive a monotonic relation on the mouth-to-mouth communication.

Ends, but not exhausted the theoretical considerations and of the research hypotheses, the necessity emerges to present more appropriate the considered methodological ways as for the reach of the aim longed for in the present research.



**Figure 1** - Hypothetical Research Model

Source: Adapted from Fornell, 1994; Parasuraman, Zeithaml and Berry, 1985.

### 3 METHODOLOGY

To develop scales with some item, Kumar, Aaker and Day (1999) recommend: (a) to establish clearly what it is desired to measure; (b) to generate the biggest possible number of item; (c) to consult specialists of the area to evaluate the set of enclosed item; (d) more to determine the type of adjusted attitudinal scale; (e) to include item that will go to assist in the validation of the scale; (f) to apply the questionnaire in an initial sample; (g) to evaluate and to refine the item of the scale and, finally, (h) to optimize the size of the scale. Thus, to reach the proposed aim to develop and to validate a scale of evaluation of the perceived quality, the present research was divided in two phases, being first of qualitative nature (exploratory) and second of quantitative character.

The first phase made possible one better understanding of the nature of the problem and consisted of exploratory study of qualitative nature whose purpose was to raise the attributes that are associates directly with the perception of quality of the services given for the operators of pay-tv. For in such a way, 60 interviews in depth with customers and salesmen were accomplished. It fits to highlight that the participants were chosen by convenience and the interviews were accomplished personally, with the aid of semi-structured scripts, recorded, transcribing and analyzed by means of the technique of content analysis, as recommended for Malhotra (2006).

The second phase of the study had context characterized for a descriptive conclusive boarding and still quantitative with one it cuts only transversal line, involving a study of the type survey, using themselves as instrument for the collection of the data, structured, formal a questionnaire, with closed questions for self-filling, validated in daily previous test and applied later the consuming subscribers of pay-tv (Malhotra, 2006). The applied questionnaire to the consumers, directly, is characterized as a primary source of information (Mattar, 2005).

The final version of the questionnaire resulted in 94 observable indicators, at least contends three item for each variable, in accordance with the recommendations of Hair (2006, p. 786) “to use four indicators whenever possible [and] (...) to avoid constructs with less than three”.

The scale used in the collection instrument is of the type to interspace assumed, that is, that one that requests the respondents so that they designate the numbers understood between 1 to 10, correspondents the notes that indicate the importance degree, of agreement or discord with each sentence, estimating equal breaks between each note.

In this study, the population is represented by all the consumers of the services of pay-tv of the city of Belo Horizonte, MG. the sample used for the accomplishment of the descriptive phase, beyond not probabilistic, also is of the type for convenience, that is, is defined before by theoretical standard what statisticians, with the aim to fill categories of the theory (Eisenhardt, 1989). In this research, the sample can also be classified as of the type snow ball, that is, “some individuals use themselves as informing (chosen to have the desired characteristics) to identify others with the same characteristics” (Churchill & Surprenant, 1982, p. 346).

It was gained, finally, 431 valid questionnaires and its data later were treated by statistical processes, such as: analysis of normality of data, analysis of outliers, analysis of non-response bias, descriptive analysis as exploratory and classificatory study, methods of internal validation - Alpha de Cronbach, confirmatory factorial analysis – Modeling of Structural Equations (SEM) e, finally, a diagram of ways that it searched to evidence the relationships between the variable of SEM (Hair, Tatham, Anderson, & Black, 2009; Klem, 1995).

### 4 ANALYSIS OF RESULTS

First, it was looked to make an exploratory analysis of the data base for posterior application of the variation statistical techniques.

## 4.1 ABSENT DATA

Breaking of the counting of the absent data in the data base, 68 absent data (0.17% of the base of 92 variable and 431 cases) dispersed in 42 questionnaires were found. 389 complete questionnaires had been obtained. An occurrence of absent data dispersed between questionnaires and variable is noticed low so that no apparent standard is salient and the percentages meet well under any platform that could present significant differences in the results (Hair, Tatham, Anderson, & Black, 2010). In this way, it was preferred to give a direct treatment putting back the lost data for the arithmetic mean of the answers, given that, under these conditions, any alternatives would produce resulted with imperceptible differences.

## 4.2 EVALUATION OF NORMALITY

When analyzing the normality graphs a moderate trend of the data is revealed to be symmetrical, with some variable if holding in way asymmetric (positively and negatively) or distributed in way almost uniform.

Applying a formal test of the normal parameters and general evaluation of the attendance of normality (test J-B), it was verified that the entire variable violate the normality presupposition. The problems most frequent were positive the negative asymmetry (22 variable under -1) and curtose (17 variable with values above 1). In the general, 55 variable present asymmetry or curtose is of the limits of  $\pm 1$ , what it indicates a point of cuts for the deviation of the normality that cannot be ignored (Muthen & Kaplan, 1985).

## 4.3 OUTLIERS

Aiming at to classify outliers univariate employed the criterion of value Z it are of the limits of  $\pm 3$ , identifying 91 outliers univariate.

To identify the multivariate cases employed the method of in the distance of Mahalanobis ( $D^2$ ) divided by the degrees of freedom. As al cites Hair, Tatham, Anderson, & Black (2010), when the reason of in the distance of Mahalanobis divided for the degrees of freedom surpasses the value of four units can be considered multivariate potentials outliers. However, none case with value of this platform was detected adopting the procedure. As outliers univariados had represented isolated and dispersed answers in some questionnaires (its exclusion would limit the sample to 344 questionnaires), it was preferred it hold back such cases in the base for ends of comparison of results.

## 4.4 ANALYSIS OF LINEARITY

Recalling that modeling techniques usually rely on analysis of correlations, we must mark the results regarding the fulfillment of this assumption. This elapses of the observation of that the coefficient of Pearson is an adjustment index that only identifies linear answers between the variable. Therefore, in this topic the degree was analyzed where the variable in study behaves as this criterion.

In order to verify if it had a breach of this condition, verified that 3,871 of the 4,186 correlations between the 92 variable were significant, 92% of the total of the matrix. Therefore, it can be suggested that the variable are adjusted in relatively linear way (Norusis, 1999).

#### 4.5 REDUNDANCY AND MULTICOLINEARITY ANALYSIS

Kline (1998) suggests that the evaluation of presence of expressive correlations between the variable of the study is made, therefore these cases can indicate redundancy in the data tested in the model. For such caution when analyzing is suggested correlations with superior values to 0,90.

A correlation above this platform between B10\_FCN6 (“It offers the possibility to choose the desired idiom”) and B10\_FCN7 (“It offers the possibility to choose the desired legend”) with  $r=0,908$  was only found. As they are indicators of the same construct, this problem was not considered as serious. Equally, considering the measures of inflation of the variance (VIF), the indicators of construct Pride had only presented values above limits 10, in marginal way.

As if they deal with dependent constructs, whose variability expects that they are explained by the excessively indicating/constructs ones of the study, this breach is had as a not problematic situation for the research.

#### 4.6 ANALYSIS OF DIMENSIONALITY

To analyze the attendance of the unidimensionalidade presupposition, was verified: 1) the result of the AFE indicates the existence of an only factor with self-valued better than one (1), this is, applied the criterion of Kaiser (Mingoti, 2005); 2) the factorial loads surpass the value of 0,600; 3) the commonalities are greater than 0,400. All the constructs had taken care of criterion 1 and the too much criteria (2 and 3) also were taken care of.

To evaluate the quality of the data and the factorial solution was analyzed if: 1) measures KMO are above 0,700 (or 0,600 at least); 2) the extracted variance is better than 60%; 3) the test of sphericity of Bartlett presents resulted significant. In this way accepted a good evidence of the one-dimensionality of the constructs, reiterating the possibility to be advanced in the evaluation of the trustworthiness of the measurement scales. The results are presented in Table 1.

**Table 1** - General measures of adequacy of the factorial solution for the constructs

Constructs	Variance Explained	KMO	Bartlett test	GL	Sig.
Brand and Tradition of the Operator	77%	0,897	2324,249	15	0,00
Status and Social Ending	74%	0,856	1472,102	10	0,00
Attendance	66%	0,915	3002,541	36	0,00
Payment Process of the services	75%	0,824	984,125	6	0,00
Problem Solving Capacity	74%	0,903	3423,632	28	0,00
Sound and Image Quality	76%	0,786	1154,272	6	0,00
Factor Recording and storage features	74%	0,873	2174,045	15	0,00
Factor Configuration and navigation features	66%	0,861	2246,096	21	0,00
Programming (Channel Pack)	60%	0,924	2838,172	45	0,00
Additional Services	75%	0,629	624,332	3	0,00
Price	72%	0,851	1519,047	10	0,00
Satisfaction	84%	0,739	880,108	3	0,00
Repentance	78%	0,799	1247,082	6	0,00
Recommendation / Communication	79%	0,669	812,903	3	0,00
Proud	92%	0,772	1348,049	3	0,00
Loyalty Propensity	78%	0,810	1168,768	6	0,00
Perceived Value	88%	0,768	1076,019	3	0,00

Source: data of the research.



## 4.7 ANALYSIS OF RELIABILITY

To analyze the trustworthiness applied measured it Alpha de Cronbach, who indicates the estimate of the variance shared between it props up true of its construct and the indicators showed in the study. Typically values send regards of, at least, 0,600 although platforms in the house of 0,700 or 0,800 to be more pleasant.

The results in Table 2 show to high trustworthiness of the measurements, showing good adequacy of the mensuration model and favorable evidences to lead the analysis of the validity of the measurements.

**Table 2** - Measure Cronbach's Alpha

Constructs	Alpha
Brand and Tradition of the Operator	0,939
Status and Social Endorsement of the Operator of pay-tv	0,912
Attendance	0,934
Payment process of the Services	0,890
Problem Solving Capacity	0,948
Sound and Image Quality	0,889
Recording and storage features	0,928
Configuration and navigation features	0,914
Programming (Channel Pack)	0,914
Additional Services	0,833
Price	0,900
Satisfaction	0,905
Repentance	0,897
Recommendation / Communication	0,867
Proud	0,953
Loyalty Propensity	0,906
Perceived Value	0,934

Source: data of the research.

## 4.8 VALIDITY OF MODELO

To inquire the validity of construct the methods of modeling of structural equations are the most popular (Fornell & Larcker, 1981; Podsakoff et al., 2003). Although popular, this method is sufficiently restrictive how much its presupposition, what it limits its applicability in some situations practices. She is highlighted necessity of samples of high size especially when the breach of multivariate normality occurs or more complex models are had (Fornell & Bookstein, 1982). In this study, considering having 92 variables initially, an appropriate sample would have that to have 4,232 cases approximately.

In such conditions, Bagozzi and Heatherthon (1994, p. 38) suggest strategies that they aim at to reduce the complexity of the structural model, by means of the strategy of partial disaggregation. It is about a proposal to add, by means of simple the arithmetic mean, the indicators of the block-type constructs of observed variable and the use of these blocks as indicating when testing the structural model.

The same proposal et is suggested by authors of technique PLS to operationalize factors of second order (Hair, Hult, Ringle, & Sarstedt, 2014; Ronkko & Evermann, 2013). Moreover, the use of Parcels has desirable characteristics, which are: a) these item are more trustworthy than the individual item; b) parcels has better characteristics of distribution; c) complex models can more easily be dear with the use of parcels (Little, Jones, Penton-Voak, Burt, & Perrett, 2002).

Considering such points, to evaluate the convergent validity, were verified factorial loads of the constructs; being these significant to the level of 5% or 1% and evidences of the convergent validity of the measures are had. It is observed, in Table 3 that, according to the criterion of the significance of loads, all the constructs indicators/had obtained convergent validity.

For the constructs of second order of the structural model the traditional method of analysis of discriminant validity was employed suggested by Fornell and Larcker (1981) to evaluate the discriminant validity. These authors suggest to compare the extracted average variance of the indicators of the constructs with the shared variance enter the theoretical constructs (R2 obtained by means of the correlation of you prop up them dear in the PLS). These results meet in Table 4.

It is revealed that the scales of the constructs had presented discriminant validity, except for the correlation between “total Quality Perceived” and satisfaction. In this in case that, the analysis of the discriminant validity were made verifying if the reliable break (95%) of the correlation corrected for the trustworthiness (formula of Spearman Brown) contained break 1. Linear transformation of Fisher Z to construct the symmetrical breaks reliable was used it; it was identified that the correlation corrected for the reliable trustworthiness has break varying between 0,700 and 0,800, indicating the existence of discrimination in the data. To inquire the last component of the validity of construct (nomológica validity), was looked to identify if the relationships between the latent variable of the model are supported by the empirical data (Netemeyer, Bearden, & Sharma, 2003).

**Table 3** - Evaluation of the convergent validity of the measures

Model of Mensuration	Sample	Error	T Value
B13_PREC1 <- Price	0,912	0,011	86,348
B13_PREC2 <- Price	0,913	0,012	76,661
B13_PREC3 <- Price	0,906	0,014	66,362
B13_PREC4 <- Price	0,814	0,026	30,924
B13_PREC5 <- Price	0,673	0,041	16,280
B14_LEAL1 <- Loyalty	0,892	0,016	56,855
B14_LEAL2 <- Loyalty	0,899	0,015	61,287
B14_LEAL3 <- Loyalty	0,883	0,019	45,574
B14_LEAL4 <- Loyalty	0,855	0,017	50,239
B14_ORG1 <- Pride	0,951	0,007	132,529
B14_ORG2 <- Pride	0,957	0,009	105,541
B14_ORG3 <- Pride	0,962	0,007	141,889
B14_SAT1 <- Satisfaction	0,918	0,012	74,045
B14_SAT2 <- Satisfaction	0,936	0,009	105,808
B14_SAT3 <- Satisfaction	0,902	0,018	51,174
B14_VAL1 <- Perceived Value	0,939	0,010	96,149
B14_VAL2 <- Perceived Value	0,943	0,011	83,578
B14_VAL3 <- Perceived Value	0,937	0,013	73,772
B14_WOM1 <- Recommendation	0,782	0,043	18,059
B14_WOM2 <- Recommendation	0,936	0,011	88,705
B14_WOM3 <- Recommendation	0,944	0,009	106,794
F01 <- Total Perceived Quality	0,688	0,033	20,665
F02 <- Total Perceived Quality	0,712	0,033	21,434
F03 <- Total Perceived Quality	0,775	0,026	30,424
F04 <- Total Perceived Quality	0,564	0,049	11,507
F05 <- Total Perceived Quality	0,799	0,022	36,664
F06 <- Total Perceived Quality	0,776	0,025	31,242
F07 <- Total Perceived Quality	0,609	0,038	16,070
F08 <- Total Perceived Quality	0,779	0,021	36,911
F09 <- Total Perceived Quality	0,654	0,035	18,503

F10 <- Total Perceived Quality	0,259	0,056	4,633
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Source: Data of the research. Comments: a) Sample is the obtained standardized weight for sample; b) I make a mistake It is I make a mistake it dear of the estimate; c) value t is the reason enters the non-standard weight for its makes a mistake standard. When bigger that 2 indicates statistical significance to 5%.

**Table 4 -** Evaluation of the discriminant validity

Constructs	1	2	3	4	5	6	7
1_Loyalty	<b>0,78</b>	0,83	0,31	0,59	0,79	0,75	0,73
2_Pride	0,69	<b>0,92</b>	0,34	0,52	0,83	0,69	0,69
3_Price	0,1	0,12	<b>0,72</b>	0,28	0,29	0,39	0,49
4_Total Quality Perceived	0,35	0,27	0,08	<b>0,46</b>	0,52	0,69	0,54
5_Recommendation	0,62	0,69	0,08	0,28	<b>0,79</b>	0,67	0,61
6_Satisfaction	0,56	0,47	0,16	<b>0,48</b>	0,45	<b>0,84</b>	0,71
7_Valor Percebido	0,53	0,47	0,24	0,29	0,37	0,5	<b>0,88</b>
AVE	0,78	0,92	0,72	0,46	0,79	0,84	0,88
CC	0,93	0,97	0,93	0,89	0,92	0,94	0,96
AC	0,91	0,95	0,9	0,86	0,87	0,91	0,93

Source: The data under the table show the correlation to the square and that the main diagonal line is the AVE. All time that a value under the diagonal line is better than the AVE of the column or the line, we would have the situation where the variance shared for the constructs surpasses the explained variance of the item, violating the discriminant validity.

Figure 2 sample that the constructs explain little more than 40% of the final endogenous constructs (recommendation, pride and loyalty) and more than 60,5% of the variability of the satisfaction. To analyze the significant ways appealed the procedure to it of bootstrapp that it allowed to generate estimates of test t and significance. The analysis of the significance and the values of loads can be seen in Table 5.

**Table 5 -** Result of the hypotheses of the proposed model

Relationship	Sample	Errot	T Value	Sig.
Price -> Satisfaction	0,051	0,041	1,260	<b>0,208</b>
Price -> Perceived value	0,364	0,047	7,671	0,000
Total Quality Perceived -> Satisfaction	0,432	0,042	10,367	0,000
Total Quality Perceived -> Perceived value	0,438	0,042	10,323	0,000
Satisfaction -> Loyalty	0,746	0,025	29,606	0,000
Satisfaction -> Pride	0,689	0,033	21,107	0,000
Satisfaction -> Recommendation	0,671	0,034	19,729	0,000
Perceived value -> Satisfaction	0,450	0,048	9,413	0,000

Source: Data of the research. Comments: a) Sample is the obtained standardized weight for complete sample; b) I make a mistake It is I make a mistake it dear of the estimate; c) value t is the reason enters the non-standard weight for its makes a mistake standard; d) Is the significance of the relation.

In the represented model, the hypothetical relations as well as the standardized weights obtained way are observed bootstrapp. In Table 5 it is observed that the relations proposals had obtained significant relations except “Price -> Satisfaction” (p = 0,208).

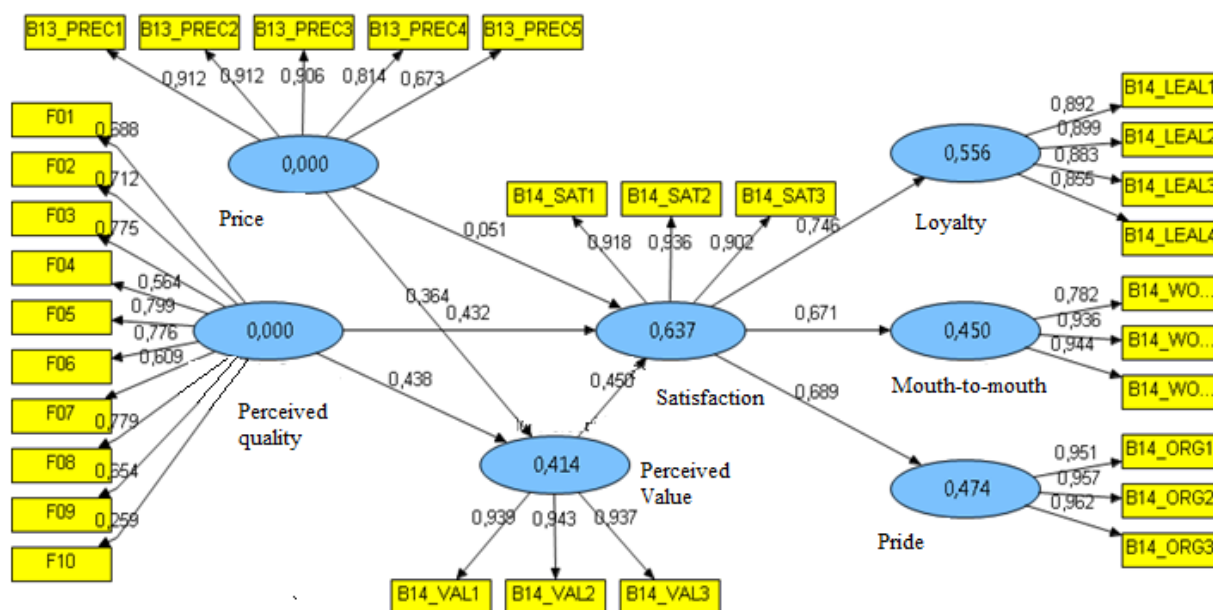


Figure 2 - Hypothetical Research Model

Source: Adapted from Fornell, 1994; Parasuraman, Zeithaml and Berry, 1985.

## 5 CONCLUSIONS

The main contribution of this work consists of the validation of a theoretical model adapted to be used as tool of evaluation of the quality perceived for the customers with regard to the services of pay-tv and, still, to identify the impacts of the perceived total quality. This study also it contributed to strengthen the theory that relates construct quality perceived total with others, derivatives, such as satisfaction, loyalty, pride and mouth-to-mouth communication, indicating that these, is not isolated concepts, but that they are interconnected.

These affirmations can be confirmed with the described content in the literature revision on the perceived quality, of form that this is composed for diverse attributes and dimensions. The obtained results had allowed to conclude that the perceived quality total is one construct with some dimensions consisting of diverse attributes of quality, on which the consumers attribute different weights (bigger or lesser), as can be evidenced in the tested hypothetical model in this research.

The tested model validates the impact of the quality perceived on the satisfaction and the perceived value, confirming what Parasuraman, Zeithaml and Berry (1985) affirm. In such a way, the bibliographical revision is in accordance with the existing relation in the model, therefore, if the consumer perceives quality in the used service and its expectations are taken care of have direct and significant relations of the quality perceived with its satisfaction and the value perceived for it.

The hypothetical model foresaw a relation of direct impact of the price on the satisfaction of the consumer, however, with the results obtained by means of the test of the proposed model, was not possible to confirm this hypothesis. The result showed that the price can see to exert impact on the satisfaction, however this relation occurred of indirect form by means of the perceived value. In such a way, a direct relation between these constructs was not confirmed.

The hypothesis of that the price exerts impact on the perceived value was confirmed by means of the tested model, confirming literature. The price can be used as a comparison instrument that the consumer uses to attribute subjective value to a product or marks specific. Although Monroe (1990) affirms that the price is determinative in the choices of the consumer, indications in the literature were not found that the same exerts impacts in its satisfaction with the product or service.

The results show that the satisfaction exerts direct influence on the propensity to loyalty, pride and recommendation (mouth-to-mouth).

The direct positive relation of the satisfaction on the pride was confirmed in the model of the research. The same positive direct relation of the satisfaction was found with regard to the mouth-to-mouth communication (recommendation), what it can be confirmed, also, for authors such as Solomon (2011), Silva Leite and Gonçalves (2007). Although the present research has not shown a direct relation of the quality perceived with the mouth-to-mouth communication, Tamashiro et al. (2007) they affirm to exist this relation, being able to be evidenced of indirect form by means of the satisfaction.

The perceived quality total presents one high predictive capacity of the satisfaction that, in turn, presents significant impacts in the propensity to loyalty, the pride and in the mouth-to-mouth communication/recommendation, then is of extreme importance that the operators of pay-tv are intent will offer services of high-quality.

Finally, of different form of what it was proposed in the initial model of this research, it can be concluded that the price does not generate direct impact in the satisfaction of the consumers of pay-tv, even so exists an indirect impact by means of the perceived value. The too much hypotheses of the model could have been confirmed.

The academic implications of the present research meet in the boarding of constructs and innovative relations that could here have been tested and proven, concerning the behavior of the consumer of the services of pay-tv established. Soon, the present research contributed, of unknown form, to the scientific production concerning the subject.

How much to the management implications, these inhabit in the contribution and the supply of subsidies for the taking of decision and strategic orientation of managers and administrative of the segment of TV for signature in diverse parts of the country, as for the behavior and attitudes of its market.

Moreover, it must be highlighted that the interviewed ones were selected by means of a not probabilistic system of sampling, what does not allow the generalization of the obtained results. It must be considered, also, that the data were collected only one time in the time (cut transversal line) and the attributes considered for the consumers currently can suffer modifications. Therefore, accomplishment of longitudinal studies sends regards to it that allow confirming the validity of the instrument along the time.

Finally, people of different geographic regions of the country will be able to consider other attributes that will have to be contemplated in future studies, in order to adapt the scale proposal the different contexts. However, adaptations depend on prior qualitative studies that allow raising other attributes that, possibly, will have to be considered.

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