

Strategy and business economics

## Satisfaction of private interest associations' members: a study with sugarcane producers in Brazil

*Satisfação em associações de interesse privado: uma aplicação com produtores de cana-de-açúcar no Brasil*

*Satisfacción en asociaciones de interés particular: una aplicación con productores de caña de azúcar en Brasil*

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### Abstract

This study aimed to identify satisfaction antecedents presented by sugar cane producers with the associations they belong to. It was developed a model composed of seven dimensions which were grouped into two types: individual aspects (economic, networking and honor) and collective aspects (perception of services, representation, trust and relevance of the association). It was performed one quantitative and descriptive study, conducted through questionnaires applied directly to producers. 550 questionnaires were completed and 411 of these were valid. For the data analysis, correlation and multiple linear regression between the variables were used. The results showed that all seven variables were positively correlated with satisfaction, however, only five of them comprised the final model after multiple linear regression: perception of services offered, representation, trust, economical aspect and honor. Surprisingly, the results also showed that collective aspects affected more the satisfaction than individual aspects.

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**Keywords:** Associativism; Satisfaction; Predecessors of satisfaction; Collective action

### Resumo

O objetivo do estudo foi identificar os elementos preditores da satisfação apresentada por produtores de cana-de-açúcar com as associações de adesão voluntária que eles fazem parte. Foi desenvolvido um modelo composto por sete dimensões aglomeradas em dois tipos: aspectos individuais (aspectos econômicos, estabelecimento de novos relacionamentos e honra) e aspectos coletivos (percepção de serviços, representação, confiança e relevância da associação). Questionários foram aplicados diretamente a 550 produtores e desses 411 foram válidos. A partir dos dados levantados,

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foram feitas análises de correlação e regressão linear múltipla entre as variáveis. Os resultados identificaram que todas as sete variáveis do modelo apresentam correlação positiva com a satisfação, entretanto apenas cinco delas compuseram o modelo final após a regressão linear múltipla: percepção de serviços oferecidos, representação, confiança, aspecto econômico e honra. Os resultados também mostraram, diferentemente do esperado, que os aspectos coletivos influenciam mais a satisfação dos produtores do que os aspectos individuais. Apresentam-se importantes orientações sobre a pesquisa em associativismo e a gestão de associações.

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*Palavras-chave:* Associativismo; Satisfação; Antecessores da satisfação; Ação coletiva

## Resumen

El objetivo en este estudio es identificar los factores predictivos de satisfacción presentada por productores de caña de azúcar con relación a las asociaciones de afiliación voluntaria a las que pertenecen. Se desarrolló un modelo compuesto por siete dimensiones organizadas en dos tipos: aspectos individuales (aspectos económicos, establecimiento de nuevas relaciones y honor) y aspectos colectivos (percepción de los servicios, representación, fiabilidad y relevancia de la asociación). Se aplicaron cuestionarios directamente a 550 productores, de los que resultaron 411 válidos. A partir de los datos recolectados, se realizaron análisis de correlación y regresión lineal múltiple. Los resultados mostraron que las siete variables del modelo se correlacionan positivamente con la satisfacción, sin embargo, sólo cinco de ellas compusieron el modelo final tras llevarse a cabo la regresión lineal múltiple: percepción de los servicios ofrecidos, representación, fiabilidad, aspecto económico y honor. Además, los resultados indicaron, a diferencia de lo esperado, que los aspectos colectivos afectan más la satisfacción de los productores que los aspectos individuales. Se presentan importantes orientaciones sobre los estudios en asociativismo y la gestión de asociaciones.

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*Palabras clave:* Asociativismo; Satisfacción; Factores predictivos de la satisfacción; Acción colectiva

## Introduction

The associations between producers of sugarcane in Brazil are formed by the guild of producers by producing regions. As an example, in south-central Brazil, there are 31 associations with about 18,000 sugarcane producers.

Until the early 1990s, the current regulations in the sector forced the participation of the producers in associations. With the deregulation, the producers would be free to join voluntarily the association they preferred, regardless of the region in which they are located, beginning to contribute financially. Other changes have taken place in the sector with the deregulation and the end of state support apparatus. From that moment on, the relationship of the actors through the associations was expanded in order to increase participation in the political process, and the members of associations had new demands, searching for cost reduction and product differentiation (Mello & Paulillo, 2005).

Given the importance of the association for producers and the freedom to join the associations they liked the most, the benefits provided by them can define their existence and stability. This is because the voluntary nature of associations positions their members as clients, demanding for specific services and choosing to remain bound to it by weighing the costs and benefits arising from membership. These costs are mainly related to entrepreneurs' time of opportunity costs and capital opportunity costs for the maintenance of the association. Thus, managers must seek to draw attractive actions in order to ensure the continued participation of its members (Conejero, 2011; Nassar & Zylbersztajn, 2004).

Associations can provide a range of individual and collective benefits, as well as facilitate the growth of economic and

social relations among their members. The degree in which associations provide desired benefits to the members can vary considerably, which ultimately affects their participation in association activities and enables many members to be disappointed with the business. Therefore, an important task for the long-term sustainability of business associations is to understand the determinants of adherence of member satisfaction (Newbery, Sauer, Gorton, Phillipson, & Atterton, 2013).

In this context, this paper aims to identify predictor elements of satisfaction presented by the producers of sugarcane with the associations they belong. In order to do this, a model was developed by the authors for a subsequent examination through statistical analysis. We will present below the factors studied leading theorists of the subject and that were added to the model of the research.

## Satisfaction in the context of associativism

Since the existing relationship between members and association is similar to the relationship between customer and company, the concept of satisfaction developed by marketing theorists in the business context can be applied in this context. Oliver (1996) argues that there are plenty of concepts for satisfaction, which hinders a simple definition for that term. However, he presents its own definition, stating that satisfaction is the judgment that a characteristic of the product or service or the product or service itself provided (or is providing) a pleasant level of achievement related to consumption. Another definition is given by Kotler (2000, p. 58), stating that satisfaction “[. . .] is the feeling of pleasure or disappointment resulting from the

comparison of the performance (or result) obtained from a product in relation to buyer's expectations". Kotler (2000) asserts that satisfaction is achieved when the perceived result is equal to or greater than the expectations presented by the buyer.

Importing the concept of satisfaction to the context of association, it can be said that the members' satisfaction occurs when they get results equal to or higher than expected by being part of the group. Thus, it can be said that the reasons that lead companies or individuals to become part of the association are the same reasons that will make them stay if these factors are sufficiently met and matched.

In voluntary associations system, the motivation of members and their interpretations of associativity maintains the logic of membership, being a determinant factor of success or failure of the association (Bennett & Ramsden, 2000). Previous research has identified a number of reasons for membership in business associations, highlighting the following aspects: the acquisition of information, access to specific services, lobbying and self-regulation, representation of collective interests, marketing and group buying opportunities, social benefits, compliments and accreditation (Bennett & Ramsden, 2007; Newbery et al., 2013).

The analysis of the motivation for membership of companies and individuals can be made in the light of the logic of services and of collective activity. The logic of services means that associations have to respond to the individual and specific needs and demands of the members, causing the association to resemble a business services company. On the other hand, the logic of collective activity focuses on the association's role in acting on behalf of all, or at least the majority, or in the interests of its members. The logic of collective activity, particularly in the search for representational influence, lead associations to seek a ratio as high as possible of members of its sector or relevant area of interest, in order to maximize its legitimacy to speak on the sector's name as a whole (Bennett & Ramsden, 2000).

We then note that membership to an association is given both for reasons of individual aspects and collective aspects. According to Bennett and Ramsden (2007), associations are able to offer some unique blends of individual benefits tailored to niche strategies, and collective benefits arising from shared information and opportunities.

These aspects were presented by Olson (1971) when studying collective actions, stating that, in large groups, both collective and individual interests should be promoted. Unlike the small groups, collective rewards are not enough to attract participants in large groups. Thus, it is necessary that the members understand the individual benefits that they can get by being part of a given group. That is because, according to Olson (1971), the larger the group, the farther it gets to get even an ideal supply of any collective good, and the less probability has the group to act in order to obtain even a minimal amount of such good. Thus, the larger the group, the less it promotes its common interests; consequently, an additional incentive should be given for companies or individuals to become part of it. Based on these aspects, the following hypotheses have been proposed by the research:

**Hypothesis 1.** Individual benefits provided to producers through the association influence in the satisfaction perceived by the members.

**Hypothesis 2.** Collective benefits provided to producers through the association influence in the satisfaction perceived by the members.

Both individual and collective benefits offered by associations cover different aspects that can contribute to the satisfaction of participants in the groups. Below, we present the different types of individual and collective benefits offered by the associations to their members.

#### *Individual benefits*

Individual benefits are those provided individually to participants, so that the benefit received is different for each one. Although economic incentives are of great importance to members of associations, social and psychological aspects such as prestige and respect are also relevant to them. Some scholars of organizational theory point out that the social incentives should be analyzed in the same way monetary incentives are (Olson, 1971). Thus, these two kinds of benefits will be presented herein.

#### *Economic aspects*

Economic aspects is one of the individual benefits provided by associations to their members. According to Olson (1971), the group increasing provides the cost reduction assigned to each participant in order to increase the benefits available to them. Moreover, according to Bennett and Robson (2001), this cost reduction comes primarily from savings in transaction costs and economies of scale provided by associations from the specific services offered by them. Thus, the gain of expertise that the association may have in the execution of certain services may represent a financial gain to the members and, in addition, there is potentially a transactional efficiency of the member with the association that does not motivate the development on its own a given service; in other words, it is more worthwhile to hire the association than to develop the services on its own (Williamson, 1985). Thus, it can be said that the economic benefits offered by them arise from the individual and collective services available to members.

Based on the interpretation that in general financial returns affect the motivation and satisfaction of individuals, we developed the following research hypothesis:

**Hypothesis 1a.** The monetary returns available to producers through the association influence the satisfaction perceived by the members.

#### *Contacts*

Associations are networks of connections that go beyond economic issues by allowing knowledge and confidence to be developed among their members. Thus, participants are able to obtain benefits from the institutional environment in which they operate (Bennett & Ramsden, 2007). From the moment that associations are perceived as horizontal networks, they can

be understood as environments with a collective action and are capable of generating factors such as social capital, collective learning and reputation, providing greater competitiveness for members (Barra, Oliveira, & Machado, 2007). Once associations can be construed as business networks, the benefits suggested by literature may be transported to network associations. Among the benefits, there is the establishment of contacts and important relationships through the existing relationship with the association and its members. According to Håkansson and Snehota (1997), the relationship between two actors can change the way they are perceived by other existing actors. This perceived identity affects the possibilities of acting and may contribute to building new relationships. Thus, the links developed between companies in business relationships affect their behavior and identities.

Based on the importance of building relationships and important contacts for the development of companies, the following hypothesis was developed:

**Hypothesis 1b.** The possibility of building contacts and important relationships for producers through association influence the satisfaction perceived by the members.

#### *Honor*

The honor aspect presented here is linked to the feeling generated in the associations' members to be part of a group. Thus, when they are identified as part of a particular group, this feeling is developed by the members.

Some researches have discussed the relationship between the identification of the actors with the group of which they are part and the active participation of them in collective actions developed within the group. It has been observed that those actors having a higher degree of identification with the group are intrinsically more motivated to participate in collective actions and are more committed to the goals and interests of the group. Thus, to these participants, concern for the collective purposes overcomes individual goals. In contrast, participants who identify less with the groups of which they are part are less willing to contribute to the unique goals of the group, being willing to commit with the collective goals that are, in fact, their own individual goals (Van Zomeren, Spears, & Leach, 2008). Once this identification with the group can influence the level of participation of members, it is possible that it may also affect their satisfaction. Also, since the honor was established here as the feeling generated by membership in the association, the following hypothesis was formulated:

**Hypothesis 1c.** The sense of honor provided by membership in the association influences the satisfaction perceived by the members.

Although the associations allow the scope of purely personal individual interests, a characteristic feature of them is to promote the common interests of the group; therefore it is essential that they develop this function (Olson, 1971), as developed below.

#### *Collective benefits*

Collective benefits are those common to all participants, so that no member of the group can be excluded and nor be denied the satisfaction provided by them. We present below four types of collective benefits: services, representativeness, trust and relevance of associations. Nassar and Zylbersztajn (2004) also showed that associations formed by large and homogeneous groups of members tend to have a greater range of common benefits.

#### *Perception of service supply*

According to Bennett and Ramsden (2000), the main reason that leads members to join the association is access to services, be they specific or collective. Similarly, the main reason that lead members to leave the associations is dissatisfaction with the services offered by them. A survey conducted by Newbery et al. (2013) showed that associations based on services provide higher levels of satisfaction to their members. According to Bennett and Robson (2001), the main services offered by the associations consist of collective and self-regulation functions. However, other low-cost services, low frequency and low duration are also offered to participants. The authors point out that many of these less prominent services are attractive to new members who see them as services that can be used if one day they need them. The authors define this factor as a kind of insurance rate, once it will be available to members when needed.

As quoted in the text on individual aspects, the services offered by associations are the main sources of economic benefits of the members. But here we not emphasize the satisfaction displayed by the participants to the services used by them and their returns, but how much they believe all the services available to them are in accordance with the needs of those who are part of the association. Thus, all the services provided are highlighted, including the less frequent ones, analyzed by Bennett and Robson (2001). Based on these aspects, the following research hypotheses were developed:

**Hypothesis 2a.** Perception of the service offerings available to producers influences the satisfaction perceived by the members.

#### *Representativeness*

Representational influence is the goal of almost every business associations and is a fundamental part of the constitutional mission and democratic structure of almost all of them (Bennett & Ramsden, 2000). In this sense, one of the main collective benefits offered by the associations are the representation activities, by seeking to promote and defend the interests of members who are part of it (Perry, 2012). This power of representation is built through the participation of members in training arrangements so that the greater the reputation of the collective actors involved, the greater the reputation of the entire association (Mello & Paulillo, 2005). Greater legitimacy of the association itself demonstrates its strength to seek the protection of the interests of members and to change the institutional environment as representative private institution (North, 1994).

Despite the importance of the representativeness of associations, studies have shown that it is not the main reason of affiliation for companies or individuals. As shown above, the main motivation of the participants would be the services offered. Nevertheless, representation is also a source of motivation and satisfaction of members and therefore we formulated the following research hypothesis:

**Hypothesis 2b.** The representative nature of the association influences the satisfaction perceived by the members.

### Trust

Bennett and Ramsden (2000) argues that associations enjoy a certain context of trust by providing a specific relationship market with its members, which is different from other business service providers. This allows organizations to connect more closely to their “customers” than in a relationship of pure market.

Koutsou, Partalidou and Ragkos (2014) highlight the fact that recent research has linked confidence to collective action and cooperation between members of groups for mutual benefits. This aspect is underscored by Durston (2003, *apud* Barra et al., 2007) by stating that the share capital resulting from certain social relationships provide trust, reciprocity and cooperation between those involved, and can generate greater benefit to those who have it.

According Koutsou et al. (2014), the existence of trust between members and members with the institution of which they are part provides the network breakthrough for collective action, influencing the development of the group. From the authors’ point of view, there is a distinction between networks and collective actions. While networks are characterized by interactions and conviviality, collective actions are characterized by the synergies developed to achieve the common goals.

Also according to the authors, this trust refers to one of the features provided by the social capital. This aspect is highlighted by Putnam (2005, p. 177) by stating that social capital refers to “[...] the characteristics of social organization, such as trust, norms and systems, contributing to increase the efficiency of society by facilitating coordinated actions”. Once that trust affects coordination and the involvement of members associations, and this involvement could affect the satisfaction felt by them, it we developed the following research hypotheses:

**Hypothesis 2c.** The trust felt by members regarding the association influences the satisfaction perceived by the members.

### Relevance of the association for producers and for the sector

The association reportedly has a very important role for its members and the sector as a whole, since, from the beginning of its formation, it has the purpose of acting in the interests of its members by providing information, supporting negotiations with suppliers and buyers of products of its members, qualifying members and their labor, among other potential services (Zylbersztajn & Farina, 1999).

Rao, Morrill, and Zald (2000) highlight, however, that when decisions taken by associations hinder the distribution of benefits among its members, the affected participants attempt to

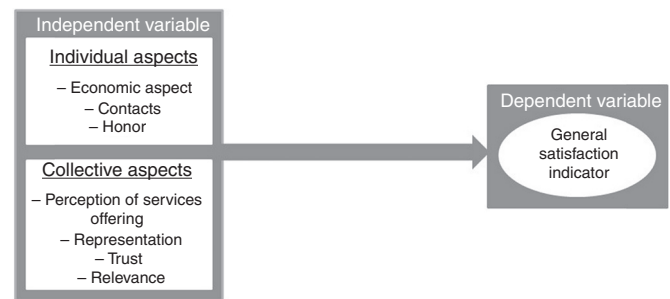


Fig. 1. Model developed to determine the satisfaction of producers with the independent variables and the dependent variable.

influence the decision and legitimize new organizational forms. The associations are then affected by the cost of influence, since the collective action fails due to social movements initiated. Thus, the relevance they represent decreases and an environment is developed around a new organizational form.

Based on these factors, we can interpret that while the association takes action according to the needs of its participants, they attribute some importance to it and show a state of satisfaction with the relationship. Thus, the following hypothesis was established:

**Hypothesis 2d.** The importance given to the association by producers influence the satisfaction perceived by them.

A study by Cafferata (1979) analyzed the satisfaction of the members of an association of professionals in the light of exchange theories (Blau, 1964; Homans, 1961) and collective action (Olson, 1971). According to the author, the exchange theory suggests that people will be satisfied with the organization when they reach the goals set by their members. The theory of collective action suggests that satisfaction is affected by participation in activities that provide particular benefits. Thus, the study by Cafferata showed greater emphasis on individual aspects than on collective aspects. Similarly, Mello and Paulillo (2005) emphasize that the actions of participants of sugarcane associations in the state of São Paulo are more focused on individual issues than collective ones as a result of the existing culture.

Based on this emphasis by the authors on the individual nature of benefits offered by the associations, in order to point out that these benefits attract more members than the collective benefits, we developed a third hypothesis for the research:

**Hypothesis 3.** The individual benefits perceived by members influence more the satisfaction felt by them than the collective benefits.

Table 1 below shows the assumptions made for this study.

Based on literature presented herein and in the cases constructed by them, we designed the model shown in Fig. 1. The dimensions treated within individual and collective benefits have been identified as independent variables since it is thought that they are responsible for the generation of satisfaction of producers. The member satisfaction was identified as a dependent variable, since it is expected that it will change due to the action of other variables.

Table 1  
Research hypotheses.

Hypothesis 1	<p>Individual benefits provided to producers through the association influence the satisfaction perceived by the members.</p> <p><b>H<sub>1a</sub></b> – The monetary returns available to producers through the association influence the satisfaction perceived by the members.</p> <p><b>H<sub>1b</sub></b> – The possibility of building contacts and important relationships for producers through association influence the satisfaction perceived by the members.</p> <p><b>H<sub>1c</sub></b> – The sense of honor provided by membership in the association influences the satisfaction perceived by the members.</p>
Hypothesis 2	<p>Collective benefits provided to producers through the association influence in the satisfaction perceived by the members.</p> <p><b>H<sub>2a</sub></b> – Perception of the service offerings available to producers influences the satisfaction perceived by the members.</p> <p><b>H<sub>2b</sub></b> – The representative nature of the association influences the satisfaction perceived by the members.</p> <p><b>H<sub>2c</sub></b> – The trust felt by members regarding the association influences the satisfaction perceived by the members.</p> <p><b>H<sub>2d</sub></b> – The importance given to the association by producers influence the satisfaction perceived by them.</p>
Hypothesis 3	<p>The individual benefits perceived by members influence more the satisfaction felt by them than the collective benefits.</p>

## Methodology

To achieve the research's proposed scope, we made a quantitative and descriptive study, using the questionnaire as a data collection instrument. The questionnaire consisted of questions regarding the profile of the respondents and issues concerning the proposed research model. Thus, the issues were related to the seven dimensions presented as predictors of satisfaction of members and to their general satisfaction. We used five-level Likert scales to verify the behavior of producers before each of the independent variables addressed in the research and also for the dependent variable investigated, with 1 corresponding to strongly disagree and 5 for strongly agree. The scales used were adapted for use within the context of the study, as shown in [Table 2](#).

Questionnaires were given to sugarcane producers and filled while attending events for the sector. Questionnaires were proposed over 19 events, leading to the final 550 completed questionnaires. Of this total, 139 incomplete questionnaires showing no response in the variables that would be used later were eliminated.

The high rate of incomplete questionnaires may be due to the difficulty of the producers interpret the questions asked. Thus, a caveat is made, because of the possibility of a bias in the form of the questionnaires. Possibly, if a trained interviewer had conducted the search, the number of incomplete questionnaires would be lower. After the elimination of partially completed questionnaires, 411 valid questionnaires were left.

Among the respondents, there are producers of different states and cities, distributed in four states (São Paulo, Minas Gerais, Mato Grosso and Alagoas) and 81 cities. Another important aspect is that the producers also have different sizes, ranging between 2 and 70,000 ha of area for planting cane, and 82.7% of them have an area smaller than 1000 ha. In addition, 411 producers who participated in the survey are distributed among 21 associations. These factors indicate the heterogeneity of the sample used, as befits the profile of the cane producers in Brazil.

From the 411 valid questionnaires, data was processed and statistical analysis was made using SPSS software. Correlation and multiple linear regression tests were performed, as presented in the next section.

## Results

In order to verify the relationship of the independent variables and the dependent variable, the calculations of correlations and multiple linear regression were performed. The calculated values of the correlations are shown in [Table 3](#). The results show that all investigated variables have significant positive correlation with the indicator of overall satisfaction, the level of  $\alpha = 0.01$ . This indicates that for all variables, the increase in each one of them represents an increase in overall satisfaction indicator producers.

Among the variables, the trust in the association presented by producers was the one that showed the strongest relationship with their satisfaction ( $r = 0.717$ ). Subsequently, the representative nature of the association ( $r = 0.698$ ) and the monetary returns available to producers through association ( $r = 0.646$ ) showed moderate values of correlation with satisfaction. Then the perception of service offerings available to producers ( $r = 0.606$ ) and the honor that producers feel for being part of the association ( $r = 0.604$ ) showed values of close correlation. The possibility to build contacts and relationships important for producers through association ( $r = 0.567$ ) also showed moderate correlation value. Finally, the association relevance felt by producers both for them and for the sector as a whole presented the lowest correlation coefficient with satisfaction ( $r = 0.407$ ) and was the only one with a value below 0.5.

Calculation of the average of the correlations presented within the groups classified by the research shows that individual aspects ( $r = 0.606$ ) and collective aspects ( $r = 0.607$ ) have similar values of correlation with overall satisfaction rate. However, standard deviation of the collective aspects was 0.142, while of the individual aspects was 0.040, indicating a greater dispersion of the values of the collective aspects. This shows that the variables that make up these aspects are linked to the satisfaction in a more distinct way when compared between them.

It is important to remember that the strong correlation values presented do not imply a causal effect on the dependent variable. These values only show the similar directions data tend to follow. Thus, the links extracted from the correlation test are too weak for the model definition. In order to identify the producers' predictors of satisfaction and thus the evaluation of hypotheses and the construction of the final model, we performed a multiple linear regression calculation for all variables. The results can be seen in [Table 4](#).

Table 2  
Developed scales and theoretical framework.

Dimensions	Scales	Authors
Economic aspects	I feel economically satisfied with the association.	Olson (1971) and Bennett and Robson (2001)
Contacts	To take part in the association allows me to make important contacts/relationship.	Hákansson and Snehota (1997), Barra et al. (2007), and Bennett and Ramsden (2007).
Honor	For me it is an honor to be part of the association.	Van Zomeren, Spears, and Leach (2008).
Perception of service offerings	The services offered by the association meet the needs of producers.	Bennett and Robson (2001), Bennett (2010), and Newbery et al. (2013).
Representation	I feel fully represented by the association.	Mello and Paulillo (2005), Perry (2012), and North (1994).
Trust	I trust the association as good executor of his role.	Bennett (2000), Koutsou et al. (2014), and Putnam (2005).
Relevance	If the association ceased to exist there would be losses for producers and the sector.	Rao et al. (2000) and Zylbersztajn and Farina (1999)
Overall satisfaction indicator	Overall, I am satisfied regarding the association.	Bennett (2000), Cafferata (1979), and Oliver (1996)

Table 3  
Correlation of the independent variables with the overall satisfaction rate of producers.

	Economic aspect	Contacts	Honor	Perception of services	Representation	Trust	Relevance
Pearson Correlation	0.646**	0.567**	0.604**	0.606**	0.698**	0.717**	0.407**
Significance	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Relevance	411	411	411	411	411	411	411

\*\* Correlation is significant for  $\alpha = 0.01$ .

Table 4  
Multiple linear regression of independent variables with the overall satisfaction rate of producers.

Model	Non-standardized coefficients		Standardized coefficients	T	Significance
	B	Standard deviation	Beta		
(Constant)	0.277	0.156		1.775	0.077
Economic aspect	0.096	0.044	0.107	2.185	0.029*
Contacts	-0.018	0.043	-0.019	-0.416	0.678
Honor	0.092	0.046	0.094	2.008	0.045*
Perception of services	0.231	0.040	0.221	5.840	0.000**
Representation	0.176	0.049	0.198	3.616	0.000**
Trust	0.354	0.045	0.362	7.791	0.000**
Relevance	-0.286	0.395	-0.013	-0.683	0.223

\* Significant for  $\alpha = 0.05$ .

\*\* Significant for  $\alpha = 0.01$ .

The results of multiple linear regression showed that two of the independent variables raised by the study were not significant. The possibility of creating important contacts and relationships with other actors and the relevance of the association identified by the producers did not indicate having causal relation with the satisfaction felt by them. Thus, hypotheses H<sub>1b</sub> and H<sub>2d</sub> were rejected.

As for the other variables, they showed significant amounts, causing the hypotheses H<sub>1a</sub>, H<sub>1c</sub>, H<sub>2a</sub>, H<sub>2b</sub> and H<sub>2c</sub> to be accepted. It is noteworthy that the variables related to service, representation and trust were significant for  $\alpha = 0.01$ , while the economic aspect and the honor were significant for  $\alpha = 0.05$ .

Thus, not all the variables raised by the study are antecedents of the satisfaction of producers. Only the variables service, representation, trust, economic aspect and honor showed to have

causal effect with the dependent variable. The model considering only the variables that presented a statistical significance showed  $R^2 = 0.639$ , indicating that 63.9% of the variability of the data obtained for the satisfaction of producers is explained by this model. Based on these results, we reformulated the model, as shown in Fig. 2.

It is also worth noting the change of position between the variables compared to the values of correlation. While in the correlation the order of impact of the variables was trust, representation, economic aspect, perception of services, honor, contacts and relevance, in the regression the order was trust, perception of services, representation, economic aspect and honor. Note that the variable perception of services changed its position when performing the regression. Thus, even though it presented a relationship with the dependent variable weaker than 3 other

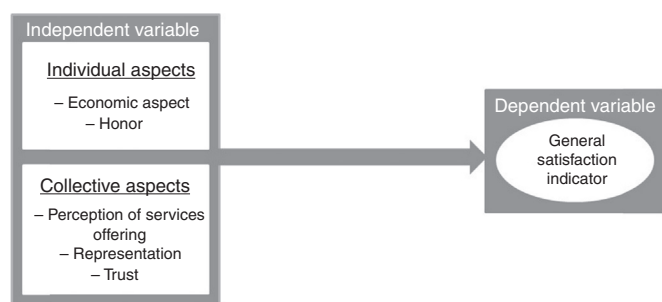


Fig. 2. Adjusted model with the independent variables and the dependent variable.

variables, its degree of causality was lower than only one of them.

Finally, it is also important to make a final relation between the two groups classified in the research. By observing the variables that make up the groups, it is clear that the two variables that were not part of the final model belong each to one of the groups. However, the fact that two variables of each part were rejected did not lead to rejection of the general hypotheses 1 and 2, so that  $H_1$  and  $H_2$  hypotheses were accepted. Furthermore, although the other two variables of the group of individual aspects presented a significance, they both obtained the level of  $\alpha=0.05$ , while in the collective group all aspects were significant at the level of  $\alpha=0.01$ . This shows that the collective aspects affect more the overall satisfaction of producers than the individual aspects; thus, hypothesis  $H_3$  was rejected.

### Managerial implication

The identification of variables that affect the satisfaction of producers is of great value to managers of associations. From the moment that the associations have become of voluntary contribution, they had to work in order to be attractive to producers. Thus, this research shows a possible path that can be followed by managers to make members more satisfied with participation in these associations.

Therefore, the managers must identify the services considered by its members as more relevant and necessary for them. Even if these services are not often used, the association must strengthen its position about services in a clear and strengthened way in external communication. They must also have a high level of representation and demonstrate this to its participants. Again, the association needs to communicate very well its actions of representative nature.

It is also important that they provide confidence and that they are able to develop a sense of belonging and honor in its members. Relationship techniques associated with database tools, the strengthening of organizational culture through the organizational rituals are welcome examples from the corporate world that go in this direction and that may well be implemented in this context, possibly more easily because of the symbolic dimension that the association has for producers or for the city and region. Last but not least, it is crucial that the association provides satisfactory economic benefits to its members, i.e., is truly effective in the services it intends to develop, taking advantage

of the scale it possesses and being able to take these services to a bigger number of associated producers interested in them.

### Conclusion

This study was able to identify the predecessor dimensions and predictors of satisfaction of the producers concerning the associations to which they belong. From the multiple linear regression analysis of the variables identified in the baseline with the overall satisfaction rate, five dimensions composed the final model: perception of services offered, representation, trust, economic aspect and honor.

As shown at the beginning of the work, satisfaction of the members of the associations are consequences of the reach of individual and collective benefits consistent with their expectations. Accordingly, aspects have been identified for both types of benefits. However, the collective aspects had greater impact on satisfaction of the members than the individual ones, unlike expected before the achievement of the research. Both dimensions that make up the individual aspects – economic factors and honor felt by the members for being part of the association – showed less significance when compared to the other dimensions.

Another aspect to be considered is that, since it was identified that 63.9% of the variability of the data obtained for the satisfaction of producers is explained from the model composed of five dimensions, it appears that there are other issues that can cause satisfaction of producers. Thus, future research may try to determine other sources of satisfaction among them.

Future research may also try to identify moderating variables that may influence the relationship between the dimensions found here and satisfaction. Internal features of associations and producers, as well as characteristics of the existing relationship, can be one of the aspects that can compose these variables.

### Conflicts of interest

The authors declare no conflicts of interest.

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