



INHIBITORY FACTORS IN THE ORGANIC FOOD PURCHASE FOR HEALTH BENEFIT

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ABSTRACT

Purpose: Several studies show factors that have a positive impact on the buying behavior of organic foods. Regarding the factors that inhibit the consumption of this type of product, considered an option for maintaining health, few investigations are perceived, both in national and international literature. This investigation aimed to measure which influence price sensitivity, perceived availability and lack of product knowledge can have on inhibiting the intention to buy organic food for health maintenance.

Design/methodology/approach: It was used a quantitative descriptive and inferential approach, using the online survey as a research strategy.

Findings: From the theoretical point of view, in addition to pointing out the negative impact of price sensitivity on the intention to purchase organic food, the research showed the results inconsistent with the theoretical framework that demonstrate an inclination towards reflective purchase of organic food.

Originality/value: The findings point to a new awareness in food consumption, indicating that consumers may be willing to give up convenience, in addition to autonomously seeking information that best subsidizes their food choices. In practice, the results suggest the need to reduce costs for the offer of what would be a fair price for producers and consumers.

Keywords: Organic food, Health preservation, Price sensitivity, Perceived availability, Lack of product knowledge.

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1. INTRODUCTION

The increase in demand for healthy products is due, in part, to an increasing concern of individuals to consume beneficial foods, for a better quality of life (Eberle et al., 2019). According to Euromonitor International (2017), the healthy products segment generated, in 2017 alone, around R\$ 92.5 billion in Brazil, which is in fourth place in the global ranking in the consumption of healthy foods. For Ghali-Zinoubi and Toukabri (2019), the increase in supply and the growing demand for organic products, seen as a way to preserve health, seem to have expanded rapidly in recent years and have intensified interest in this phenomenon of consumption (Eberle et al., 2019).

In this sense, the concern of producers and consumers in relation to organic and environmentally friendly products has increased the acceptance of organic foods in both developed and developing countries (Rana and Paul, 2017). Thus, due to the increase in production and domestic demand, Brazil is considered the largest consumer market for organic food in Latin America (Branco et al., 2019). According to Euromonitor International, only in 2018 and considering only the organic segment, there was a movement of around R\$ 153 million in Brazil.

In this sense, a survey conducted by Zanolli and Naspetti (2002) concluded that consumers associate organic products with health at different levels of abstraction. With regard to organic foods, Krischke and Tomiello (2009) state that the main reasons for consuming these foods are related to having a healthy life and a better quality of life. The authors show that the organic food consumer perceives this type of product as an alternative for the prevention of different diseases. In view of the growing importance of this theme, the need for research that investigates the phenomenon of buying organic food becomes evident (Rana and Paul, 2017).

Thus, several researches have been carried out on the subject showing that the most important factors that explain the purchase of organic foods are related to health and the environment (Gracia and Magistris, 2008). The study by

Basha et al. (2015) found that the intention to purchase organic products is influenced by factors such as concerns about the environment, health and lifestyle, and the quality of the products food and its subjective norms. For Ueasangkomsate and Santiteerakul (2016), the intention to buy organic food is linked, in order and importance, respectively to the factors: health, local origin, environment, food security and animal welfare.

Research carried out with consumers who habitually consume organic foods contributed theoretically-empirically to the verification of the factors: conscious consumption, perceived quality, price, brand credibility as determinants of the intention to purchase organic foods (Eberle et.al., 2019). In addition to showing that the concern with a healthier life, the research shows an inclination towards the consumption of organic foods, showing the positive impacts of the constructs conscious consumption, perceived quality and brand credibility (Eberle et al., 2019).

The research mentioned here shows, in a predominant way, factors that have a positive impact on the buying behavior of organic foods. Regarding the factors that inhibit the consumption of this type of product, few investigations are perceived, both in the national literature (Krische and Tomiello, 2009; Eberle et al., 2019) and international (Fotopoulos and Krystallis, 2002; Gracia and Magistris, 2008) that indicate reasons for restricting the consumption of organic foods. However, in these surveys, the price factor has been perceived with relevant prominence.

Some studies have identified that price-related issues are factors that inhibit the consumption of organic foods (Gracia and Magistris, 2008; Bravo et al., 2013), as well as having a negative impact on the intention to purchase these products (Bravo et al., 2013). Research developed by Eberle et al. (2019) revealed that the price factor negatively impacts the purchase of organic foods. However, in addition to price, other factors are also being considered as possible inhibitors for the purchase of organic products.

Thus, another factor that deserves a similar highlight regarding the inhibition of the purchase of organic products, concerns the perceived availability of organic foods. In this regard, it is possible to state that a low

availability of organic foods is considered a barrier to consumption (Fotopoulos and Krystallis, 2002) and can have a negative impact on the intention to purchase this type of product (Bryła, 2016). In addition, knowledge about organic food is also being considered as a restrictive factor in consumption (Krische and Tomiello, 2009) and can represent a barrier to the development of the organic food Market (Bryła, 2016).

Thus, it is known that health concerns have increased the preference for organic foods (Rana and Paul, 2017). In addition, the perception of greater nutritional value is an important demand factor for these foods (Gracia and Magistris, 2008). The intention to purchase organic food is based on health awareness that is positively associated with the consumer's buying behavior and attitude (Rana and Paul, 2017). However, consumption and growing market share for organic foods are still relatively low compared to conventional foods (Chekima et al., 2017).

Therefore, considering this reality, this study seeks to investigate how factors of price sensitivity, product availability and lack of knowledge about the product inhibit the intention to purchase organic foods to benefit health. Based on the above, it is understood that this work is relevant to the extent that it may expand the knowledge on the theme of inhibition, given the incipience of the works found in this regard. In addition to academic relevance, it also has practical relevance, since it can contribute to an important diagnosis to assist actions related to public and marketing policies.

2. Literatura Review

2.1 Buying organic food to benefit health

The term organic food refers to natural food items that are free of artificial chemicals such as: fertilizers, herbicides, pesticides, antibiotics and genetically modified organisms (Rana and Paul, 2017). Furthermore, organic foods are not subjected to irradiation, nor are synthetic chemicals used in their production, so they are considered healthy foods (Marwa and Scott, 2013).

Concerns about health, in the different dimensions of consumer understanding (health as nutritional value, health as purity; health as pleasure and holistic health perspective) have justified consumers' preference for organic foods (Ditlevsen et al., 2019). When related to organic products, health is seen from the perspective of 'health as purity', that is, consumers consider organic products as the healthiest choice because they are free of residues of drugs, toxins, pesticides and artificial additives (Ditlevsen et al., 2019).

Health awareness was considered by Paul and Rana (2012) as the best predictor of consumer attitude and behavior towards organic foods. In addition to providing the basis for purchase intent for many consumers (Rana and Paul, 2017). Eberle et al (2019) found that the intention to purchase organic food is strongly explained by the quality, price, brand credibility and conscious consumption, with conscious consumption being related to environmental and health concerns. The research showed that the concern with a healthier life positively influences the intention to buy organic food.

The attributes of environmental and health benefits determine a greater probability of buying organic foods instead of conventional ones, with the effect of the health benefit having a greater influence than the environmental impact (Gracia and Magistris, 2008). Health awareness is considered by Zanolli and Naspetti (2002) as the most important reason to explain attitude, purchase intention and consumption behavior in relation to organic foods.

The organic consumer normally perceives organic food as a possible option to prevent different diseases, as he is aware of the risks that pesticides cause to human health (Krischke and Tomiello, 2009). Therefore, health-related issues are considered reasons for the consumption of organic foods (Chryssohoidis and Krystallis, 2005; Krischke and Tomiello, 2009; Pimenta et al., 2009) and the most significant reason for the increased demand for this type of product (Shafie and Rennie, 2012). It is assumed, therefore, that the main reason for buying organic food is the beneficial effect on human health.

Thus, given the above, it is evident that the purchase of organic food is positively related to health concerns (Rana and Paul, 2017). However, it is worth noting the existence of factors that may inhibit the consumption and growth of the organic food market, so, for a better understanding of these inhibiting factors, the following sections will bring a theoretical discussion.

2.2 Price sensitivity

According to Botelho and Urdan (2005), price sensitivity can be considered a dimension which has a focus on the variation of consumer behavior due to an oscillation in the amount to be paid for a given product, that is, it is the level awareness of the price that affects consumer buying decisions. And in relation to healthy food products, the role of price is seen as an obstacle to purchase, due to the belief that products with these characteristics are relatively more expensive (Marian et al., 2014).

Research by Thompson and Kidwell (1998), for example, analyzed the consumers' choices of organic and conventional products and found that the probability of buying organic food depends, among other reasons, on price levels. The high price is considered a factor that limits the purchase of organic foods (Fotopoulos and Krystallis, 2002). For Verhoef (2005), Gracia and Magistris (2008), consumers who consider the price of organic food high are less willing to buy this type of food, consuming less.

For Bravo et al. (2013), price is a factor that inhibits the consumption of organic foods, as well as having a negative impact on the intention to purchase these products. Krischke and Tomiello (2009) point out the price as a restrictive factor in the consumption of organic foods, since the high cost worries consumers and the perception that the price is high represents the main barrier to the purchase of this type of product (Lee and Yun, 2015). For Hansen et al. (2018), higher prices can act as a behavioral barrier to the purchase of organic foods.

In their study, Ghali-Zinoubi and Toukabri (2019) investigated the background to purchase intent by demonstrating that the more sensitive a customer is to product prices, the less likely he is to buy an organic product that

is actually more expensive than the conventional. Therefore, consumer sensitivity to price is a determining factor in the intention to purchase organic food (Ghali-Zinoubi and Toukabri, 2019). In view of the above, the following research hypothesis was formulated:

H1: High price sensitivity negatively influences the intention to purchase organic food to benefit health.

2.3 Perceived availability

Convenience shopping suggests less effort in terms of saving time, physical and mental energy (Jabs and Devine, 2006). For organic foods to be purchased routinely, consumers who adopt convenience behavior require that these products are easily available in local supermarkets and that they are clearly visible, preferably with an eco-label (Hjelmar, 2011). That is, if organic food is not made available in a convenient way, many consumers will end up buying non-organic food (Hjelmar, 2011).

Organic food is an attractive proposal for the market segment formed by consumers aware of their health and who want to consume safe, nutritious and environmentally friendly products (Rana and Paul, 2017). However, organic foods are not easily available, which makes regular consumption difficult (Rana and Paul, 2017). Research by Bravo et al. (2013), for example, identified that issues related to convenience are factors that inhibit the consumption of organic foods, as well as having a negative impact on the intention to purchase these products.

In this sense, the term Perceived Availability indicates whether a consumer feels that he can easily obtain or consume a certain product (Vermeir and Verbeke, 2006). Although the high availability perceived by consumers can positively influence the intention to purchase organic food (Vermeir and Verbeke, 2006), the low availability of this type of product is considered the greatest barrier to consumption (Fotopoulos and Krystallis, 2002; Aertsens et al., 2009; Bryła, 2016) and can negatively influence purchase intent (Bryła, 2016; Chekima et al., 2019).

According to Chrysohoidis and Krystallis (2005), it is estimated that two out of three consumers consider the low availability of organic foods as the greatest difficulty in consuming this type of product. Thus, inflated in previous studies, it is assumed that the low availability of organic products on the market is an inhibiting factor to their consumption. Thus, the following hypothesis was formulated:

H2: A perceived low availability of organic products negatively influences the intention to purchase organic foods to benefit health.

2.4 Lack of product knowledge

The purchase decision process can be influenced by the knowledge that a consumer has about a product (Von Alvesleben, 1997). In relation to organic foods, knowledge and awareness can affect consumers' purchase decision (Yiridoe et al., 2005). The lack of information from consumers on the scope of the benefits of organic foods is considered by Krischke and Tomiello (2009) as a restrictive factor in the consumption of these food items. Bryła (2016) considers this factor as a barrier to the development of the organic food market. For D'Amico et al. (2016) inadequate information about organic products discourages consumers from paying a price difference for this type of product. In contrast, adequate information increases consumer knowledge about organic food and, therefore, the willingness to buy it (Gracia and Magistris, 2007; D'Amico et al, 2016).

The level of knowledge that the consumer reports about organic food indicates that the greater the knowledge, the greater the likelihood of regular purchase and consumption of this type of food (Gracia and Magistris, 2008). Thus, the intention to purchase organic foods depends on their knowledge of organic products (Gracia and Magistris, 2007; D'Amico et al., 2016). Therefore, the conscious purchase of organic foods depends on improving the degree of knowledge about this type of product (Krischke and Tomiello, 2009).

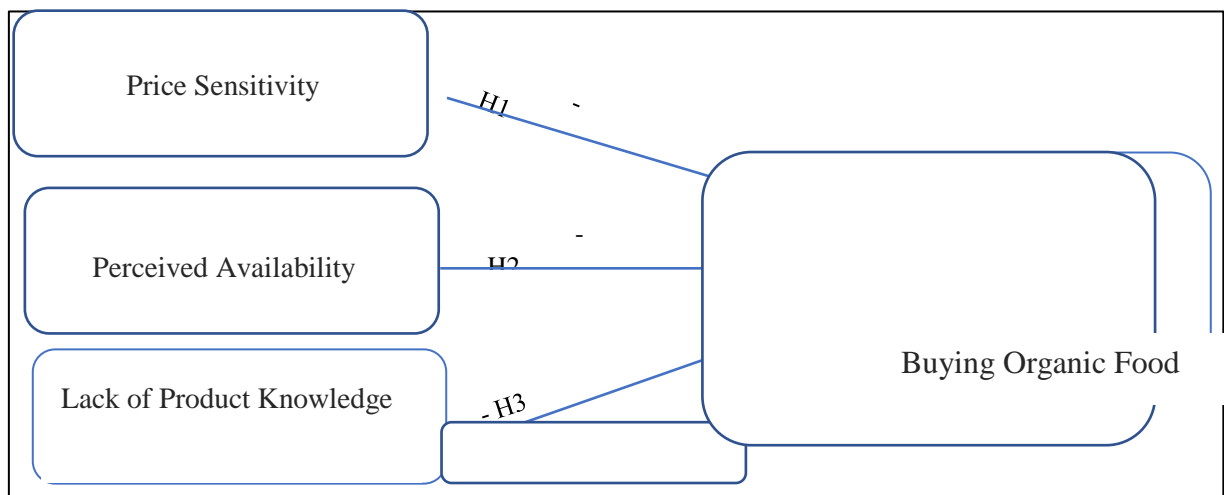
According to Chrysohoidis and Krystallis (2005), it is estimated that only two out of three organic consumers say they know a lot about organic products, while only one out of three can tell the difference between organic and

conventional foods. Therefore, based on this discussion, the following research hypothesis was achieved:

H3: The lack of knowledge about organic foods negatively influences the intention to buy these foods to benefit health.

2.5 Proposition of the theoretical model

For this investigation, the influences of the factors sensitivity to price, perceived availability and lack of knowledge of the product in the purchase intention will be considered, as described in the theoretical model below (Figure 1)



Source: Elaborated by the authors (2019).
Figure 1 - Theoretical model

3. Method

This article is a descriptive research that will use a quantitative approach (Malhotra, 2006), with the use of the online survey (Leeuw et al., 2008) as a research strategy. Initially, a bibliographic survey will be carried out through searches on the Science Direct, Proquest, Scopus e Scielo. Then, in order to investigate the influences of the independent variables price sensitivity, perceived availability and lack of product knowledge on the dependent variable intention to buy organic food, field research will be carried out.

3.1 Population and sample

The study population is composed of every Brazilian individual who shows interest in buying organic food. In order to statistically represent the population, a non-probabilistic sample was used and the research was conducted with convenience sampling (Babbie, 1999). Participants were selected using the internet access criterion. And, to enhance the sample sizing, the snowball technique was adopted which consists of collecting data from the informants indicated by one or two initial informants (Sampieri et al., 2006). A link to the research electronic questionnaire was made available to researchers' contacts via online social networks. Thus, through the sharing network, respondents were able to pass the link on to their contacts asking for their contribution to the research.

Thus, respondents participated in the present survey throughout the month of August 2019. According to Hair Jr (2005), the appropriate number of respondents to fulfill the research objectives will be 5 to 10 respondents for each item. However, since it is a non-probabilistic sample, it was not possible to make further generalizations of the results since it was not possible to consider that all elements of the population had a known and non-zero chance of being selected (Malhotra, 2006).

3.2 Data collection

Data collection took place through a questionnaire formed by validated and adapted scales, which include the research constructs as specified below. The constructs were measured using the Likert scale with a score from 1 (strongly disagree) to 7 (strongly agree). Table 1, shown below, was developed in order to present the items that composed the questionnaire, accompanied by its authorship and the constructs to which they refer. The questionnaire consisted of 15 items, distributed among independent variables, a dependent variable in addition to the sociodemographic profile of the participants.

Table 1
 Scales of constructs

Construct	Items (variables)	Code
Intention to buy organic food (IBOF) Adapted from Ueasangkomsate and Santiteerakul (2016)	- I intend to buy organic food.	IBOF01
	- I will buy organic food to ensure my health.	IBOF02
	- I aim to consume organic food as much as possible.	IBOF03
	- I intend to buy organic food to prevent diseases.	IBOF04
Price Sensitivity (PS) Adapted from Wakefield and Inman (2003)	- I am willing to make an extra effort to find a low price for organic food.	PS01
	- I will change what I planned to buy to take advantage of a lower price for organic food.	PS02
	- I am sensitive to differences in organic food prices.	PS03
Perceived availability (PA) Adapted from Hoppe et al (2010) and Vermeir and Verbeke (2008)	- Organic food is hardly available in places where I usually buy food.	PA01
	- For me, buying organic foods instead of conventional ones would be difficult.	PA02
	- If I wanted, I could easily buy organic foods instead of conventional ones	PA03
	- I believe it is difficult to buy organic food.	PA04
	- I believe it is difficult to find organic food in my neighborhood.	PA05
Lack of Product Knowledge (LPK) Adapted from Hoppe et al (2010)	- I feel like I don't know much about organic food.	LPK01
	- Compared to most people, I know very little about organic food	LPK02
	- With regard to organic foods, I don't have much knowledge.	LPK03

Source: Elaborated by the authors (2019).

3.3 Data processing

Data analysis was performed using statistical software. And, through descriptive statistics, it verified the frequency, mean and standard deviation (Collis and Hussey, 2005). Cronbach's alpha was used for the reliability analysis, considering the acceptable reliability level from 0.7 (Hair Jr. et al., 2009). The analysis of the dimensionality of the scales was performed by means of exploratory factor analysis (Corrar et al., 2011), and to test the hypotheses, multiple linear regression was used (Hair Jr. et al., 2009).

4. Presentation and Analysis of Results

In this section, the tabulation of the collected data will be presented, as well as the interpretation and discussion of the results found. Thus, aiming at this purpose, the questionnaires were inspected for possible flaws that could invalidate them, however, no non-response errors were found due to the obligation to complete all the statements, using the resource available on Google Forms. Thus, all 126 questionnaires were considered valid to compose the final sample of this study.

4.1 Demographic profile

The sample was characterized by the following statements: gender, complete education level, frequency of purchase of organic food, age, per capita monthly income per resident. In this sense, based on a percentage survey of demographic information regarding gender, complete education level and frequency of purchase of organic foods it was realized that of the 126 respondents, the majority, 73%, are female; as for the level of education, most respondents (42,1%) have graduate degrees, followed by higher education (39,7%), secondary education (16,7%) and elementary education (1,6%).

As for the demographic variables age and monthly income per capita, the average, standard deviation (SD) and coefficient of variation (CV) (Hair Jr. et al., 2009) were calculated in order to obtain greater numerical precision. Thus, it was found that the average age of respondents is 33,83 years, with SD = 10.925 and CV = 32,29%. The per capita monthly income was R\$ 2,574.14, with SD = 4741.075 and CV = 105%.

Continuing the analyzes, the next section will deal with the reliability analysis of the scales, so that, in sequence, multiple regression analyzes and hypothesis tests can be performed.

4.2 Reliability and dimensionality

To measure the reliability of the scales, Cronbach's alpha was measured in order to ensure the reliability of the items of the variables that made up the theoretical model, with satisfactory reliability of internal consistency coefficients greater than 0.7 (Hair Jr et al., 2009). Thus, only the perceived availability of the organic product construct had an internal consistency of less than 0.7, however

after removing the third statement: "If I wanted to, I could easily buy organic food instead of conventional ones", it was possible internal consistency of 0,825.

To analyze the dimensionality of the scales, Factor Analysis was used. For this, the Kaiser-Meyer-Olkin (KMO) statistical tests and Bartlett's sphericity were used. For Malhotra (2006), Bartlett's sphericity test should not exceed 0,05, whereas the Kaiser-Meyer-Olkin (KMO) test, which measures the degree of correlation that exists between variables, must obtain high values, between 0,5 and 1,0, indicating that the factor analysis is adequate (Corrar et al., 2011). Thus, for a better view of the values obtained in these tests, Table 2, below, condenses this information.

Table 2
 Summary of data reliability and dimensionality

Construct	Items (variables)	Code
Intention to buy organic food (IBOF)	- I intend to buy organic food.	IBOF01
	- I will buy organic food to ensure my health.	IBOF02
	- I aim to consume organic food as much as possible.	IBOF03
	- I intend to buy organic food to prevent diseases.	IBOF04
Adapted from Ueasangkomsate and Santiteerakul (2016)		
Price Sensitivity (PS)	- I am willing to make an extra effort to find a low price for organic food.	PS01
	- I will change what I planned to buy to take advantage of a lower price for organic food.	PS02
	- I am sensitive to differences in organic food prices.	PS03
Adapted from Wakefield and Inman (2003)		
Perceived availability (PA)	- Organic food is hardly available in places where I usually buy food.	PA01
	- For me, buying organic foods instead of conventional ones would be difficult.	PA02
	- If I wanted, I could easily buy organic foods instead of conventional ones	PA03
	- I believe it is difficult to buy organic food.	PA04
	- I believe it is difficult to find organic food in my neighborhood.	PA05
Adapted from Hoppe et al (2010) and Vermeir and Verbeke (2008)		
Lack of Product Knowledge (LPK)	- I feel like I don't know much about organic food.	LPK01
	- Compared to most people, I know very little about organic food	LPK02
	- With regard to organic foods, I don't have much knowledge.	LPK03
Adapted from Hoppe et al (2010)		

Source: Field research (2019). * V.Exp.= variance explained.

In this sense, the first variable analyzed was the intention to purchase organic food, which obtained satisfactory results regarding the reliability of the items Cronbach = 0,941, as well as the dimensionality of the construct, given the KMO index was extracted showing a valid result (0,857) above 0,5, therefore. As for factor analysis, all loads loaded on a single factor, so there was no need to remove any items. As for the Bartlett test, the construct also obtained positive results, as it obtained the Chi-square of 458,092 with 6 degrees of freedom and significance of 0,000.

The second variable analyzed was Price Sensitivity, whose results were also satisfactory as it obtained Cronbach's reliability = 0,824 and KMO dimensionality = 0,687, all above 0.5. Regarding the Bartlett test, the findings were significantly positive, considering the Chi-square of 149,866 with 3 degrees of freedom and significance of 0,000. As for the factor analysis, it is worth noting that all loads carried a single factor, so there was no need to remove any items.

Regarding the variable Perceived availability of the organic product, the third item was removed in order to improve Cronbach's alpha = 0,825, as already mentioned. The construct's dimensionality, however, obtained positive results with the KMO index = 0,764, thus presenting a valid result above 0,5. In the factor analysis, the loads loaded in a single dimension, with no need to remove any more items. The Bartlett test for sphericity, in turn, indicated a Chi-square of 185,654, with 6 degrees of freedom and significance of 0,000.

Regarding the last variable, Lack of Product Knowledge, after the validation of Cronbach's alpha = 0,882 without the need to remove items, the dimensionality test was performed. Thus, the KMO index was extracted with a valid result (0,742) and in the factor analysis, all loads loaded in a single factor, with no need to remove any item. As for the Bartlett test, the construct also obtained positive results, as it obtained the Chi-square of 200,445 with 3 degrees of freedom and statistical significance of 0,000.

4.3 Analysis of the proposed theoretical model

After analyzing the reliability and dimensionality of the scales, the proposed theoretical model and the hypotheses will be analyzed in this section,

through multiple regression. For this, the items were grouped into composite variables forming a single item and the mean, standard deviation (SD) and covariation coefficient (CC) of these items were calculated. Thus, in order to facilitate the understanding of the data obtained, Table 3 shows in a synthesized way the average responses of the variables, considering the Likert scale from 1 to 7 (I totally disagree and I totally agree).

Table 3
Descriptive statistics of the composite variables

Variables	N	Average	SD *	C.V.**
Intention to buy organic food	126	5,9623	1,47684	24,76%
Price Sensitivity	126	5,4683	1,44787	26,47%
Perceived availability of organic product	126	4,9147	1,66167	33,81%
Lack of Product Knowledge	126	3,6296	1,86963	51,51%

Source: Field research (2019). * SD = standard deviation. ** CV = Coefficient of variation

Thus, according to Table 3 above, it appears that the average of the responses of the variables tended to positively agree, since it varied within the 5 points. Only the variable lack of product knowledge obtained a lower average, however, with a high coefficient of variation (CV = 51,51%), showing that there is heterogeneity in the responses.

Multiple linear regression tests were performed using the backward method. Thus, the results indicated, in models 1 and 2, the removal of the variables perceived availability of the organic product and lack of knowledge of the product, considering $p > 0,100$. Thus, according to the regression, only the price sensitivity construct has a significant influence on the occurrence of the dependent variable purchase intention for organic food, as shown in Table 4.

Table 4
Multiple Regression (*backward* method)

Model	Variables added	Variables withdrawn	Method used
1	Price Sensitivity; Perceived availability; Lack of Product Knowledge.		ENTER
2		Perceived availability of organic product	<i>Backward F-to- remove</i> $\geq 0,10$.
3		Lack of Product Knowledge	<i>Backward F-to- remove</i> $\geq 0,10$.

Source: Field Research (2019).

In order 'to verify the correlation between the independent variables with the dependent variable intention to purchase organic food, the R value was calculated. According to the data summarized in table 5, it appears that the independent variable Sensitivity to Price, left in the model, has a positive relationship, given that it has an $R^2 = 0,587$ which demonstrates explaining 58,70% of the intention to purchase of organic foods, with a standard error estimate of 1,798. Even when observing the adjusted R^2 value, this variable still explains 58,40% of the purchase intention. According to Corrar et al. (2011), in a correlation analysis, attention should be turned to the value achieved by the adjusted R^2 , because the adjusted R^2 proposes a correction of the determination coefficient in cases where there is more than one independent variable. The Durbin-Watson value was appropriate because it was close to 2.

Table 5
Template summary

Model	R	R ²	Adjusted R ²	Estimate of standard error	Durbin-Watson
1	0,768	0,590	0,580	0,955766	
2	0,767	0,589	0,582	0,95496	2,029
3	0,766	0,587	0,584	0,955275	

Source: Field research (2019)

Finally, Table 6 presents the results of the coefficients obtained with the multiple linear regression, demonstrating the significance of each variable presented in the three models. Thus, it can be seen that in the first model, the variables perceived availability of the organic product (sig = 0,582) and lack of knowledge of the product (sig = 0,442) have a low significance, since both Sig. were above the Sig. reference standard ($p < 0,05$). In the second model, it can be observed that even with the removal of the perceived availability variable of the organic product, the variable lack of knowledge of the product obtained significance (sig = 0,515). Thus, it appears that only the variable price sensitivity obtained statistical significance, since in all models it obtained a $Sig < 0,05$, demonstrating, therefore, that there is influence on the dependent variable.

Table 6
Coefficients

Model	Nonstandard coefficients		Standardized coefficients	T	Sig.	95% confidence interval for B		
	B	Standard model	Beta			Inferior limit	Upper limit	
1	(Constant)	1,683	0,398	4,233	0,000	0,896	2,470	
	PS*	0,780	0,060	0,765	12,934	0,000	0,661	0,899
	PA**	0,030	0,054	0,034	0,552	0,582	-0,077	0,137
	LPK***	-0,037	0,048	-0,046	-0,771	0,442	-0,131	0,058
2	(Constant)	1,776	0,360	4,940	0,000	1,064	2,488	
	PS	0,785	0,059	0,770	13,247	0,000	0,668	0,903
	LPK	-0,030	0,046	-0,038	-0,653	0,515	-0,121	0,061
3	(Constant)	1,688	0,333	5,073	0,000	1,030	2,347	
	PS	0,782	0,059	0,766	13,280	0,000	0,665	0,898

Source: Field research (2019). Note. *price sensitivity, **perceived availability, ***lack of product knowledge

Thus, from the analyzes shown above, it appears that of the three hypotheses formulated, from the bibliographic study, only the first hypothesis was confirmed. Thus, hypothesis H1: "a high sensitivity to price negatively influences the intention to purchase organic food to benefit health" was confirmed with a high rate of explanation of 58,40%, as seen previously. This finding corroborates with several studies (Thompson and Kidwell, 1998; Fotopoulos and Krystallis, 2002; Verhoef, 2005; Gracia and Magistris, 2008; Bravo et al., 2013; Lee and Yun, 2015; Sørensen and Eriksen, 2018; Ghali- Zinoubi and Toukabri, 2019; Zinoubi and Toukabri, 2019) which demonstrate how consumer price sensitivity is a determining factor in the intention to purchase organic food.

However, the second hypothesis H2: "a low availability of organic products negatively influences the intention to purchase organic food to benefit health" was denied. This result goes against several researches, such as Fotopoulos and Krystallis, (2002), Aertsens, Verbeke, Mondelaers and Van Huylenbroeck (2009), Bravo et al. (2013), Bryła (2016) and Rana and Paul (2017) which demonstrate that the low availability of organic foods on the market is considered the greatest barrier to their consumption.

In this sense, it is believed that the result obtained in this research can be explained by a high sense of health awareness of individuals, since this construct is considered as a personal characteristic capable of affecting the processing of information about the health of individuals and consequently their behavioral intentions (Hong, 2009). In addition, health awareness is considered to be the best predictor of consumer attitude and behavior towards organic foods (Paul and Rana, 2012), in addition to forming the basis for the intention to purchase these products (Rana and Paul, 2017).

Thus, the results obtained can be explained by previous research that found that the greater the concern with health, the greater the likelihood of individuals adopting behaviors that promote health (Dutta-Bergman, 2005), including increasing the preference for food organic (Rana and Paul, 2017) and a consequent healthier food consumption (Mai and Hoffmann, 2012). Another reasonable assumption is that the search for personal well-being is a factor that motivates the consumption of organic food (Bruschi et al., 2015), given that, in the context of food consumption, consumers associate the well-being to physical health (King et al., 2012; Ares et al., 2014). However, the research findings converge with the study by Hjelm (2011), which showed the relevance that social and personal issues in the purchase of organic foods, indicating that concerns about maintaining health may have a greater influence on the intention to purchase organic foods than factors related to convenience.

To conclude the analysis, it was found that the third hypothesis H3: "the lack of knowledge about organic foods negatively influences the intention to purchase these foods to benefit health" was also denied. This result does not support the results of several authors, including: Kruschke and Tomiello (2009), Yiridoe et al., (2005), Bryła (2016) and D'Amico et al., (2016), among others. For these authors, the lack of information from consumers about the benefits of organic foods is considered a restrictive factor in the consumption of these food items.

It is assumed, however, that the findings of this study can be better understood when it is observed that most of the respondents in this research have a high level of education as postgraduate (42,1%) and higher education

(39,7%). This may be a relevant factor since, for the aforementioned authors, the purchase decision process can be influenced by the knowledge that a consumer has about a product. Thus, it is assumed that the individual's schooling will also affect their knowledge of the world, among which organic foods can be inserted.

In addition, health awareness can also clarify these results since it is known that individuals with a high sense of health awareness seek information related to the topic having a greater probability of involvement with cognitive and behavioral activities related to health promotion (Dutta-Bergman, 2005) being able to memorize content, later incorporating it into their behavior (Dutta-Bergman, 2006). In addition, this result also converges with the study by Hjelmars (2011), which demonstrated the reflexive buying behavior of consumers, a practice that considers the political and ethical orientation involved in consumer acts, indicating the relevance that social and personal issues in buying organic food.

5. Conclusion

The present study had as main objective to understand which factors inhibit the intention to purchase organic food to benefit health. The initial premise of this research was that price sensitivity, perceived availability and lack of knowledge about organic products negatively influence the consumption intention of these products. For this, a survey with a quantitative descriptive approach was carried out with 126 participants in order to analyze how the independent variables are related to the dependent variable intention to purchase organic products.

In this sense, it is observed through the results found that only price sensitivity has statistical relevance, negatively influencing the intention to consume organic products. According to the results obtained, the other two variables perceived availability and the lack of knowledge about organic products were not statistically significant to influence the purchase intention. In this way, the denial of the influence of these variables demonstrates a counter-intuitive result, because according to the theoretical survey done previously, statistical significance was expected.

The incongruous results with the theoretical framework, referring to the influence of the perceived availability of organic foods, as well as the consumers' knowledge about this type of product, can be more easily understood when analyzed from the perspective of changing the behavior of consumers who are ethical and politically oriented, demonstrating a new awareness of food consumption. Regarding the issues related to the availability of organic foods, the results of the research allow us to infer that in order to buy this type of product, in order to maintain health, consumers may be willing to give up convenience and undertake physical and mental efforts, overcoming the barrier of the rational use of time.

Regarding the consumer's knowledge about organic foods, the results of the study can show the reflective shopping behavior in which consumers are better informed, making social and personal considerations before their consumption acts. This implies that personal issues related to health maintenance can make consumers, independently, seek information that better subsidize their food choices.

In this sense, it is believed that this research brings theoretical contributions to the extent that it contributes to the understanding of the factors that inhibit the intention to purchase organic foods, expanding the theoretical knowledge in this regard. This study allowed to evidence the negative impact of price sensitivity regarding the purchase of organic products, despite the growing concern of people with a healthier life.

Regarding practical contributions, the results may suggest the need to reduce costs for the offer of what would be a fair price for producers and consumers. In addition, considering the robust portion of the population affected by health problems, specifically chronic non-communicable diseases, it is believed that the study contributed to public policy makers who can consider the importance of investments that promote the consumption of organic food, such as: organic agricultural production strategies that are economically more attractive, as in countries like Denmark.

Like all research, this study has some limitations, the main one having to do with the type and size of the sample adopted, since the sample for

convenience prevents generalizations of the results obtained. Another limitation is due to the fact that the research evaluates declared purchasing decisions instead of evaluating real purchasing decisions.

As a suggestion for future research, it is suggested to test theoretical models that consider other predictors of behavioral intentions related to the consumption of organic foods, as in the case of health awareness. And, the inclusion of moderating variables, as is the case with lifestyle. It is also suggested the application of research related to the theme through other methodologies, as is the case of experimental research that can better define the cause and effect relationships between the variables studied, reducing the ambiguity of the results of behavioral studies.

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