Purchase intention of Peruvian agricultural product
Intención de compra de producto agrícola del Perú

Abstract

The purpose of this study is to analyze the association of the variables country image of Peru, lucuma's product image, familiarity with Peru, and lucuma's product familiarity with the purchase intention of Peruvian lucuma because these associations haven´t been analyzed for the variable country familiarity, and for the lucuma product. As methodology, a descriptive and confirmatory research was carried out in which a structured questionnaire was used in two selected samples that correspond to consumers from two countries with different levels of familiarity with Peru. First, United States which has high familiarity with Peru, and secondly, France, whose familiarity with Peru is low. The key finding indicated that the country image of Peru and lucuma's product image are directly related; in addition, the intention to purchase Peruvian lucuma is positively related with the country image of Peru, lucuma product image, familiarity with Peru, and lucuma's product familiarity in both samples. Finally, it's concluded that the intention to purchase Peruvian lucuma is influenced significantly by lucuma's product image in both samples, when all of them all analyzed together.

Key words: Intention to purchase, lucuma, product image, country image.

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Introduction and objectives

According to Fishbein and Ajzen (1975) the intention to purchase is a process through which the consumer has the intention of buying a product in the near future; that is, a subjective inclination towards a product. But purchase intention is usually refered to the behavior, perceptions and attitudes of consumers (Mirabi, Akbariyeh, & Tahmasebifard, 2015).

In these times consumers are surrounded by a large amount of information and various forms of promotion to motivate their purchase of various products, which makes the purchase decision is increasingly complex (Madahi & Sukati, 2012).

Particularly, Keller (2001) emphasized that although the consumer intention to purchase could be affected by many uncontrollable factors by the companies, the final decision to purchase a product or service will depend on the consumer intention to purchase; therefore, it is necessary to study it.

On the other hand; lucuma is an input of luxury in the confectionery, pastry, ice cream, and delicacies industries; due to its intense and unique flavor; as well as its creamy texture (Lazaeta, 2006; Morán, 2016).

In this context, the general objective of the present research is to analyze the association of the intention to purchase of lucuma from Peru with the country image of Peru, the image of the lucuma product, the country familiarity of Peru and the lucuma from Peru product familiarity. In addition, the specific objectives are: (1) Analyze the association of the country image of Peru with the lucuma product image of Peru. (2) Analyze the association of the country image of Peru with the intention to purchase lucuma. (3) Analyze the association of the lucuma product image with the intention to purchase lucuma. (4) Analyze the association of Peru country familiarity with the intention to purchase lucuma. (5) Analyze the association of lucuma product familiarity the intention to purchase lucuma. (6) Analyze the effect of the country image of Peru, the lucuma product image, familiarity with Peru, and lucuma product familiarity with the intention to purchase lucuma.

Research question

What is the relationship between the intention to purchase of lucuma and the country image of Peru, the lucuma product image, the Peru country familiarity, and the lucuma product familiarity?

Review of the literature

The main models that studied the relationship between the country image and product image, as well as, the relationship between the country image, product image, country familiarity and product familiarity with the intention to purchase through time are.

Han (1989) proposed a model that researched the variables that affect consumers' buying intent, and identified the country image variable, and product familiarity as main variables. Later, Han (1990) developed a new model that researched the consumer's perception on the quality of the product through the appreciation of the product country origin called Halo effect. Similarly, he studied how it impacts on the intention to purchase.

Particularly, Hong and Wyer (1989) studied the country of origin effect which showed that consumers were interested in knowing more information about other characteristics of the product and its impact on the purchase intention. In consequence, they found that the information of the product country origin influences the consumer's purchase intention. A similar perspective was researched by Roth and Romeo (1992) who studied the association of the country image and product image, with the consumer purchase intention. They concluded that the country image is positively associated with the consumer intention to purchase.

Subsequently, Papadopoulos and Heslop (2000) made a multi-country analysis adapting Roth and Romero's model (1992). They found that country image is associated positively with the intention to purchase. Likewise, Lin and Kao (2004) adapted Roth and Romeo's model (1992) and found that the country of origin impacts directly on the consumer's purchase intention.

Two years later, Long Yi and Chun-Shuo (2006) researched the impact of country image, product image, and the level of linkage and knowledge of the product on the consumer's intention to purchase. They concluded that knowledge and linking of the product regulates the final effect of the country of origin variable on the consumer's intention to purchase. Similarly, Wang and Yang (2008) studied the effect of the country image and the brand personality on the consumer's purchase intention. They concluded that the brand personality and country image have a direct impact on the consumer's purchase intention.

Khan, Ghauri and Majeed (2012) developed a model that studied the impact of brand knowledge, brand relationship, behavioral intention, country of origin and past experiences on the purchase intention. They concluded that brand loyalty and brand knowledge have the highest positive relationship with purchase intention.

Parallel, Xianguo, Jing, Xia and Da (2012) researched the impact of the country of origin image, the animosity, and the consumer's ethnocentrism, on the consumer intention to purchase of domestic and foreign products. Their main conclusion is that consumer ethnocentrism positively impacts on the intention to purchase of local products; but country of origin and the animosity does not significantly impact on the intention to purchase of domestic products.

Guina and Giraldi (2012) analyzed the effect of country image and country familiarity of a product on the consumer's purchase intention. They determined that both country image and country familiarity influence the consumer's intention to purchase. Particularly, Sinrungtam (2013) studied the impact of the dimensions of country of origin on the purchase intention. He concluded that country of manufacture, country of the parts, country of the brand and country of the company dimensions have a direct impact on the consumer intention to purchase. In contrast, country of assembly and country of design dimensions does not impact on the intention to purchase.

On the other hand, Ortiz (2014) analyzed the relationship between the country of origin image and the brand personality of a product; and its influence on the consumer's intention to purchase. He concluded that the country of origin image has a direct effect on the brand personality; and in turn, this relationship has a positive impact on the consumer's intention to purchase.

In 2016, Liu and Guo (2016) researched the impact of the access, satisfaction, reputation and familiarity of the product on the intention to purchase. Their results indicate that both the familiarity of the product, as well as, the access do not directly influence the consumer's intention to purchase.

According to the literature review, one of the main conclusions is the gap regarding the research on the consumer's intention to purchase of agricultural products from developing countries. In addition, it was found that the country familiarity and product familiarity variables, which are relevant for the

research of the consumer's intention to purchase, have been little studied in the researchers that studied the intention to purchase. Therefore, the hypotheses propounded are presented (see graph 1):

H_1: The better the Country image of Peru, the greater the lucuma product image will be.
H_2: The better the image of the country of Peru, the greater the intention to purchase of the lucuma from Peru will be.
H_3: The better the lucuma product image, the greater the intention to purchase the lucuma from Peru will be.
H_4: The better the familiarity with Peru country, the greater the intention to purchase of the lucuma from Peru will be.
H_5: The better the familiarity with the lucuma product of Peru, the greater the intention to purchase lucuma from Peru will be.
H_6: The Country image of Peru, the lucuma product image, the Peru country familiarity and the lucuma from Peru product familiarity, have a significant effect on the intention to purchase the lucuma from Peru

Graph 1: Diagram of the hypotheses proposed
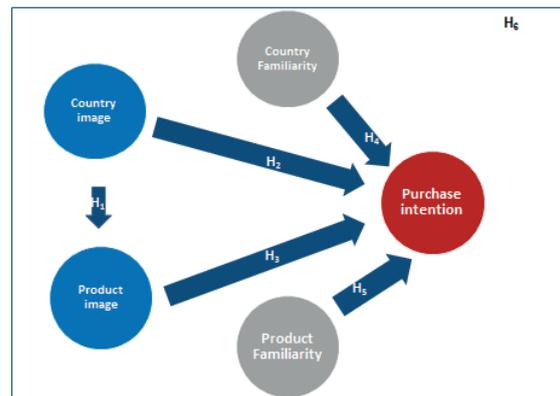
Source: Own elaboration based on the Roth and Romeo model (1992).

Method
A confirmatory and descriptive research was carried out to determine the type of relationship between the studied variables (Kumar, 2000). A structured questionnaire organized into five sections was adapted by Roth and Romeo (1992) to collect the primary information.
On the other hand, two samples were selected with different levels of familiarity with Peru, for the collec-

tion of information. The first sample was made up of people from the United States whose familiarity with the Peru is high. The second sample was made up of people from France whose familiarity with Peru is low; for this selection, the study made by Verbeke and Vackier (2004) was taken as a basis.

Douglas and Craig (2007) recommend using non-probabilistic sampling for convenience, given the cost and time constraints; as well as the difficulty of access to the samples studied. Therefore, non-probabilistic sampling was used to survey undergraduate and graduate students from the United States and France. Given the nature of the sampling, the results of the research should not be extrapolated to the universe. On the other hand, to determine the components of the country image of Peru and lucuma product image, the items of the country image and product image presented in the review of the literature were analyzed, and items (prestige, design, innovation and manpower) used by Roth and Romeo (1992) were adopted. See table 1.

Table 1: Technical Sheet of the study carried out

	France	**United States**
Universe	People older than 18 years with higher education, residing in France	Persons over 18 years of age with higher education, residing in the United States
Sampling method	Non-probabilistic; by convenience.	
Sample size	109 surveys	109 surveys
Technique to survey	Self-administered questionnaire	

Source: Own elaboration

To measure the different response categories of respondents to the items studied, the interval method was carried out, and the semantic differential scale was applied as a measurement scale. This scale was based on categories of responses ordered on a scale of seven points that represented the degree of acceptance, preference or agreement with each of the items analyzed. This scale is characterized by its simplicity of results in marketing (Kineear & Taylor, 1999).

Findings

The hypotheses raised through the study of the correlation by pairs of the variables researched were analyzed. A bivariate analysis was carried out to verify each one of the hypotheses.

Analysis of hypothesis 1 (H_1)

In the French sample, there is a positive but not significant correlation (r = 0.082, p = 0.398) between the country image of Peru and the lucuma product image. See table 2. This implies that the country image of Peru is correlated directly with the lucuma product image. However, such a correlation is not statistically significant. On the other hand, in the USA sample, there is a positive and significant correlation (r = + 0.461; p = 0.000) between the country image of Peru and the lucuma product image. See table 2.

Table 2: Summary of H_1

Pairs: (1) Country image of Peru (2) Lucuma's product image	**France**	**USA**	**France**	**USA**
	Correlation		**P value**	
	0.082	* 0.461	0.398	** 0.000

Source: Own elaboration. Legend: * Highest correlation. ** Significant correlation at 5%.

Analysis of hypothesis 2 (H_2)

In the French sample there is a positive but not significant correlation (r = + 0.074, p = 0.446) between the country image of Peru and the intention to purchase of lucuma. Therefore, the country image of Peru is directly correlated with the intention to purchase lucuma from Peru. However, such a correlation is not statistically significant. In contrast, in the USA sample, there is a positive and significant correlation (r = + 0.355, p = 0.000) among the studied variables. See table 3.

Table 3: Summary of H₂

Pairs: (1) Country image of Peru. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	0,503	*0,523	** 0,000	** 0,000

Pairs: (1) Country image of Peru. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	0,503	*0,523	** 0,000	** 0,000

Source: Own elaboration. Legend: * Highest correlation. ** Significant correlation at 5%.

Analysis of hypothesis 3 (H₃)

In the French sample there is a positive but not significant correlation (r=+0,503; p=0,000) between the lucuma product image and the intention to purchase of lucuma. Therefore, lucuma product image is directly correlated with the intention to purchase of lucuma. However, such a correlation is not statistically significant. In contrast, in the USA sample, there is a positive and significant correlation (r=+0,523; p=0,000) among the studied variables, see table 4.

Table 4: Summary of H₃

Pairs: (1) Lucuma's product image. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	0,503	*0,523	** 0,000	** 0,000

Source: Own elaboration. Legend: * Highest correlation. ** Significant correlation at 5%

Pairs: (1) Lucuma's product image. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	0,503	*0,523	** 0,000	** 0,000

Analysis of hypothesis 4 (H₄)

In the sample from France there is a positive but not significant correlation (r = + 0.140, p = 0.417) between the country familiarity with Peru and the intention to purchase of lucuma. This implies that the country familiarity is correlated directly with the intention to purchase of lucuma. However, such a correlation is not statistically significant. On the other hand, in the USA sample, there is a positive and significant correlation (r = + 0.415, p = 0.000) between the country familiarity with Peru and the intention to purchase of lucuma. See table 5. Empirical discovery represents a scientific contribution to the literature, given that there are no models that study this association.

Table 5: Summary of the H₄

Pairs: (1) Country familiarity with Peru. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	0,140	*0,415	0,147	**0,000

Source: Own elaboration. Legend: * Highest correlation. ** Significant correlation at 5%.

Analysis of hypothesis 5 (H₅)

In the French sample, there is a positive but not significant correlation (r=+0,345; p=0,000) between the lucuma product familiarity and the intention to purchase of lucuma. This implies that the lucuma product familiarity is correlated directly with the lucuma product image. However, such a correlation is not statistically significant. On the other hand, in the USA sample, there is a positive and significant correlation (r=+0,576; p=0,000) between the studied variables. See table 6.

Pairs: (1) Lucuma product familiarity. (2) Intention to	France	USA	France	USA
	Correlation		P value	

Pairs: (1) Lucuma product familiarity. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	*0,345	*0,576	**0,000	**0,000

Pairs: (1) Lucuma product familiarity. (2) Intention to purchase of lucuma.	France	USA	France	USA
	Correlation		P value	
	*0,345	*0,576	**0,000	**0,000

Analysis of hypothesis 6 (H_6)

When the four variables are analyzed together to explain the intention to purchase of lucuma, these variables are positively related to it, for both samples. Particularly, the lucuma product image is the only statistically significant explaining the intention to purchase; in both samples. Therefore, the country image of Peru, country familiarity with Peru, and lucuma product familiarity does not impact on the intention to purchase, for all samples. See table 7.

Table 7: Summary of H_6

Country image of Peru		Lucuma product image		Country familiarity with Peru.		Lucuma product familiarity.	
France	USA.	France	USA.	France	USA.	France	USA.
0,727	0,317	*0,000	*0,011	0,898	0,920	0,267	*0,000

Source: Own elaboration: * Highest correlation. ** Significant correlation at 5%.

Discussion and Conclusions

Regarding H_1, it is accepted in cases in which the consumer has high familiarity with Peru, and it's rejected when the consumer has low familiarity with Peru. Therefore, there is a partial acceptance of H_1, since this occurs only when there is high familiarity with Peru. Likewise, with respect to H_2, it must be accepted in the case that the consumer of foreign products has a high familiarity with Peru; in contrast, with consumers who have low familiarity with Peru. Therefore, there is partial acceptance of H_2. Relative to H_3; it's accepted in cases in which the consumer has high and low familiarity with Peru, this implies a very broad acceptance of H_3.

Regarding H_4, there is a partial acceptance; since it's accepted, only, when the consumer has high familiarity with Peru. This represents a scientific contribution for the academy, since the country's familiarity has not been associated by the literature with the intention to purchase. Respect of H_5, it is accepted in the cases of consumers of foreign products has high and low familiarity with Peru. Therefore, H_5 is widely accepted. Finally, with respect to H_6, it is possible to conclude that the intention to purchase of lucuma is influenced by the lucuma product image, in the case of foreign consumers with high and low familiarity with Peru. Therefore, H_6 is partially accepted.

Limitations

The reliability of the results of the research is low given the size of the samples studied that limits the preparation of a study based on gender, age and socioeconomic level; as well as, the limitations of time and money. Also, the conclusions are not generalizable to the universe given that the sampling method used was non-random. Further; the sample was not representative of the universe. It was researched with postgraduate students who tend to greater international interaction, openness and cultural knowledge. On the other hand, structural equations were not used for the analysis of the model given that only two of the variables researched were constructs (country image and product image) conformed by four dimensions. In turn, the other three variables (country familiarity, product familiarity and intention to purchase) were one-dimensional.

Further Research

It is necessary to design a model that includes constructs conformed by several dimensions in such a way that structural equations can be used to validate the model. Likewise, a random and probabilistic study with sample sizes representative of the universe is necessary so that the results can be extrapolated and an research

can be carried out by gender, age and consumer socio-economic level. In addition, it is necessary to carry out a study of the impact of the sociodemographic variables of the consumer based on the variables age, gender, and socio-economic level. Finally, it is suggested that for future research, the multidimensional country image construct be studied, as pointed out by some authors such as Martin and Eroglu (1993), Lala, Allred and Chakraborty (2009).

Managerial implications

One of the main managerial implications is that Peruvian lucuma exporters may experience greater intention to purchase of their product by the consumers when the importing country is familiar with Peru. Likewise, promoting the lucuma from Peru using the country image of Peru could generate greater intention to purchase by international consumers who have a high familiarity with Peru. In the same way, to use the lucuma product image in the commercial export strategies would positively affect the intention to purchase by international consumers with high and low familiarity with Peru. Further; those consumers who are already familiar with the lucuma from Peru are more educated in buying Peruvian lucuma. Finally, promoting this fruit using the lucuma product image could be the best way to achieve greater purchase incidence of this product by consumers with high and low familiarity with Peru; among the other variables analyzed together.

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