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Pipoli de Azambuja, Gina-María; García-Arrizabalaga, Iñaki; Rodríguez-Peña, Gustavo

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# Do image and familiarity have a significant effect on purchase intention?

¿La imagen y familiaridad tienen un efecto significativo en la intención de compra?

A imagem e a familiaridade têm um efeito significativo na intenção de compra?

Gina-María Pipoli de Azambuja \* pipoli\_gm@up.edu.pe

*Universidad del Pacífico, Peru*

Iñaki García-Arrizabalaga \*\*

*Universidad de Deusto, Spain*

Gustavo Rodríguez-Peña \*\*

*Universidad del Pacífico, Peru*

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**Abstract:** The purpose of this paper is to study the relationship between the (i) country image of Peru, (ii) cotton's product image, (iii) familiarity with Peru, and (iv) cotton's product familiarity with the purchase intention of Peruvian cotton. Survey techniques were used to collect the primary data, applying a closed question questionnaire in two samples that represent the consumers of two countries with different levels of familiarity with Peru: France and the United States. This study has found that there is a positive association between the studied variables, in at least one sample. One of the main managerial implications is that Peruvian cotton exporters could innovate their global marketing strategies using Peru's country image to improve the positioning of Peruvian cotton in international markets.

JEL classification: M31, M38, Q13.

**Keywords:** purchase intention, country image, familiarity, cotton, Peru.

**Resumen:** El objetivo de este artículo es analizar la asociación entre (i) la imagen país Perú, (ii) la imagen producto del algodón, (iii) la familiaridad con el Perú y (iv) la familiaridad con el producto algodón, con la intención de compra del algodón peruano. La técnica de encuesta se utilizó para recopilar información primaria, aplicando un cuestionario de preguntas cerradas a dos muestras que corresponden a los consumidores de dos países con diferentes niveles de familiaridad con Perú: Francia y Estados Unidos. Se encontró que existe una asociación positiva entre las variables estudiadas, en al menos una muestra. En efecto, los exportadores peruanos de algodón podrían innovar sus estrategias de marketing utilizando la imagen país Perú para mejorar el posicionamiento del algodón peruano en el extranjero.

**Palabras clave:** intención de compra, imagen país, familiaridad, algodón, Perú.

**Resumo:** O objetivo deste artigo é analisar a relação entre a imagem do país do Peru, a imagem do produto de algodão, a familiaridade com o Peru e a familiaridade com o produto de algodão, com a intenção de comprar algodão do Peru. A técnica de pesquisa foi utilizada para coletar informações primárias, aplicando um questionário de perguntas fechadas em duas amostras que correspondem a consumidores em dois países com diferentes níveis de familiaridade com o Peru (França e Estados Unidos). Verificou-se uma associação positiva entre as variáveis estudadas, em pelo menos uma amostra. De fato, os exportadores de algodão peruano poderiam inovar suas estratégias de marketing usando do país para melhorar o posicionamento do algodão peruano.

**Palavras-chave:** intenção de compra, imagem do país, familiaridade, algodão, Peru.

## 1. Introduction

Since pre-Inca times, cotton has been a strategic sector of the regional economy, being one of the most critical agro-industrial crops in Peru and representing the livelihood of 20,000 farming families (Ministry of Agriculture and Irrigation., s.f.; Institute of Economic and Social Studies, 2016). Moreover, cotton is the most used natural fiber in the textile industry (Esteve-Turrillas & de la Guardia, 2017), and cotton quality is one of the critical success factors in the development of textiles (Gyftou, Pavlatou, Spyrellis & Hatz, 2000). Hence, cotton is the main non-food agricultural product with the most extensive international trade in the world (Mallqui, Quispe & Rabanal, 2017). Therefore, in 2005, the Ministry of Foreign Trade and Tourism named Peruvian cotton as a flagship product, in order to contribute to internationalizing Peruvian cotton and textile products of Peruvian cotton (Cadenillas, 2016).

However, the global textile industry is characterized globally by vertical integration within large companies. In consequence, Peruvian cotton producers do not have high bargaining power in the industry (Calderón, Leyva, Miranda & Pais, 2017). Additionally, there is a more competitive environment composed of China, India, the United States, and Pakistan, which have a market share in the international cotton trade of 28%, 12%, 10%, and 7%, respectively (Trade Map, 2016). They intensively invest in research and development, increasing their productivity and reducing costs. Furthermore, Indian cotton is produced from genetically modified seeds, making it more economical than Peruvian cotton (Silva, 2005).

As a result, it is necessary to evaluate the appreciation of Peruvian cotton by international consumers. Recent evidence suggests that it is critical to study the purchase intention since consumers will purchase a specific service or product depending on how they evaluate and appreciate them (Chang & Chen, 2008; Madahi & Sukati, 2012; Huy & Svein, 2012). Additionally, this is useful for estimating sales and demand, choosing target markets, and designing international marketing strategies. Therefore, it is relevant to study the variables that affect or have an association with the purchase intention of Peruvian cotton in the new global economy of cotton textile products. Notably, this paper aims to evaluate international consumers' purchase intention of Peruvian cotton and derivative products in order to contribute to internationalization and overcome international market pressures of the cotton textile industry.

Most Peruvian cotton export companies do not have a recognizable brand name; therefore, Peru's country image will have a mediating role in foreign customers' intent to purchase. According to Bruwer, Buller, Saliba & Li (2014, p. 98), "country image could play the role of a summary variable, meaning consumers use it to summarize information about product attributes". Hence, the country of origin can affect quality perception and purchase intention (Balabanis & Diamantopoulos, 2004). Notably, products from developing countries such as Peru are supposed to be of inferior quality compared to those from developed countries (Han & Lee, 1994; Amine, Chao & Arnold, 2005).

For this reason, this paper will study the country image of Peru and its relation with the purchase intention of Peruvian cotton.

Product image can affect the purchase intention of the consumer since it can affect the evaluation and perception of such a product (Lee & Ganesh, 1999; Roth & Romeo, 1992). Furthermore, product familiarity and country familiarity variables can affect purchase intention; Arvola, Lahteenmaki, and Tourila (1999) demonstrated that a greater product familiarity directly affects the intent to purchase, while Guina and Giraldi (2012) concluded that country familiarity is a variable that can affect consumer purchase intention. Country image is defined as the general perception that people have of a particular country, which is created through functional, emotional and experiential variables (Roth & Romeo, 1992; Papadopoulos & Heslop, 2000).

Similarly, the product image is defined as the general perception related to the production of a specific product from a particular country, which in turn may be dissimilar according to the category under assessment. Notably, product image implies value judgments and will be motivated mainly by functional aspects such as its quality, cost-benefit ratio, and other variables that contribute to generate a country image perception based on the image of its national products (Roth & Romeo, 1992; Papadopoulos & Heslop, 2000; Guina & Giraldi, 2012).

Likewise, the country familiarity variable is conceptualized as the entirety of knowledge and experiences related to a specific country. Both variables determine the degree of impact or relation that an international consumer may have with a particular country. Being composed of experiential aspects, country familiarity will be different for each person, since they will have different perceptions of a specific country (Guina & Giraldi, 2012; Kaynak & Kucukemiroglu, 1992; Urbonavicius, Dikcius & Navickaite, 2011). The originality of this paper is based on the research of the relationship between country familiarity and purchase intention since there is a relative lack of research on the topic. As a result, the purchase intention of an agricultural product from a developing country such as cotton from Peru represents a research gap that this article aims to fill.

The product familiarity variable is defined as all of the knowledge and experience that is created from direct or indirect interaction with the products of a specific country (Guina & Giraldi, 2012; Alba & Hutchinson, 1987; Marks & Olson, 1981; Brucks, 1985; Phau & Suntornnond, 2006). Finally, purchase intention is defined as consumers' desire to acquire a specific product among other products, which satisfies their needs or the established search criteria, without necessarily translating into the purchase or final behavior of the consumer (Huy & Svein, 2012; Madahi & Sukati, 2012; Khan, Ghauri & Majeed, 2012).

In this context, the general objective is to examine the association between the purchase intention of Peruvian cotton with each of the following variables: country image, product image, country familiarity, and product familiarity. In addition, the specific objectives of the study analyze the association of 1) the country image of Peru with cotton's

product image; 2) the country image of Peru with purchase intentions of Peruvian cotton; 3) cotton's product image and purchase intentions; 4) familiarity with Peru and purchase intentions of Peruvian cotton; 5) cotton's product familiarity with purchase intentions of Peruvian cotton, and 6) the effect of Peru's country image, cotton's product image, familiarity with Peru and cotton's product familiarity, with purchase intentions of Peruvian cotton. Consequently, it will be possible to design global marketing strategies for Peruvian cotton export companies and better understand foreign customers' purchasing decisions.

Correlations were used to analyze the first five hypotheses, and a regression analysis was employed to examine the sixth hypothesis. The data came from two samples: France and the United States. Primarily, survey techniques were used to compile the primary data, adapting Roth and Romeo's questionnaire (1992). The first part of the paper explains the main theoretical models and findings regarding the relationship between the studied variables and purchase intention. Following this, the hypothesis and theoretical model of purchase intentions of Peruvian cotton are established. Then, the research method and information about the studied samples will be explained, before an analysis of the results, conclusion, and subsequent discussion.

## **2. Theoretical framework**

Roth and Romeo (1992) researched the relationship between country image and product image with the consumer purchase intention and identified four dimensions that shape country image, which are assessed at the same time when the consumer evaluates a different product. Their model helped to decide when it is advisable to promote the product's country of origin and when it is not. The authors suggested that it is advisable to promote country image when it is associated with a positive perception of product image. Therefore, the following hypothesis is stated:

- $H_1$ : the better the country image of Peru is, the better cotton's product image is.

Additionally, Roth and Romeo (1992) concluded that country image is directly associated with the intent to purchase, and the country and product image would positively impact on the purchase intention when there is a positive match between country image dimensions and these dimensions are vital product features. Notably, several global marketing researchers have studied the relation between country image and the intention to purchase. Han (1989) studied the impact of country image on consumer purchase intention, finding that when there is not product knowledge, it can affect purchase intention through the consumer's perceptions and beliefs.

A similar conclusion was reached by Li, Ahn, Zhou and Wu (2009) who determined that if foreign consumers have a positive country image perception, companies from this country can improve the purchase

intention of their products. Li, Yang, Wang, and Lei (2012) found that country image has a positive effect on purchase intention, and Ortiz (2014) showed that country of origin image impacts positively on brand personality, and this interaction has a positive impact on consumers' purchase intentions. Furthermore, Hong and Wyer (1989), Wang and Yang (2008), Zbib, Wooldridge, Ahmed and Benlian (2010), Khan, Ghauri, and Majeed (2012), and Sinrungtam (2013) found that country image could positively affect the intention to purchase. In consequence, it can be expected that:

- H<sub>2</sub>: the better the country image of Peru is, the greater the purchase intention of Peruvian cotton will be.

Subsequently, Papadopoulos and Heslop (2000) and Lin and Kao (2004) examined Roth and Romero's model (1992) with different approaches. First, Papadopoulos and Heslop (2000) incorporated a multi-country study, analyzing the impact of the product's country of origin on the consumer's purchase intention. Second, Lin and Kao (2004) added product brand image to the studied model. Both studies reached similar conclusions to Roth and Romeo (1992) since they found that there is a direct association between both variables, and country of origin impacts positively on the consumer's intention to purchase.

Other international marketing researchers have continued to study country image, as well as product image and its relation to the intent to purchase. For example, Lee and Ganesh (1999) determined that the product brand image and country image positively influence evaluation of the brand. Similarly, Imelia and Ruswanti (2017) concluded that a positive product brand image and country of origin image encourage the intent to purchase. The same results were found by Lin and Chen (2006), who analyzed the effect of the country and product image and found that both variables positively affect consumer purchase intention. Hence, it can be stated that:

- H<sub>3</sub>: the better cotton's product image is, the greater the purchase intention of Peruvian cotton will be.

Some authors who continue to study the relationship between country image, product image and their relation with the intent to purchase have employed a new research approach; however, they focused on the product and country familiarity effects on such relations. Han (1989) and Arvola, Lahteenmaki and Tourila (1999) found that a greater product familiarity directly affects the intent to purchase. Additionally, Guina and Giraldi (2012) evaluated the influence of country image, country familiarity and product familiarity with purchase intention, and concluded that a greater country and product familiarity positively influence country image, as well as consumer purchase intentions.

Furthermore, Kim, Shin, Cheng, Lennon and Liu (2015) studied the relationship between country familiarity and brand attitude; they found that when consumers become familiar with the country, they form a positive brand attitude; while Han (1990) found that country image is



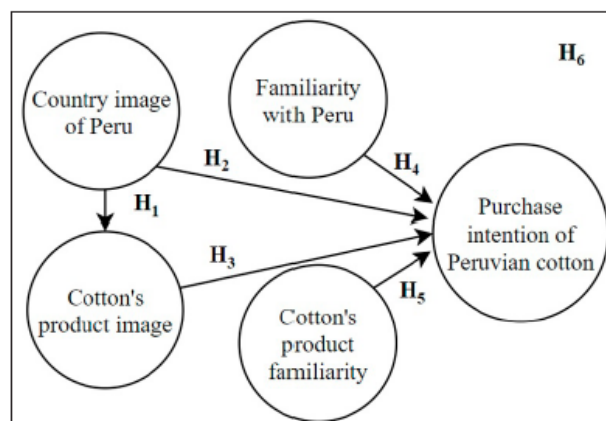
more likely to have a direct impact on the intention to purchase for a brand from a familiar country than for a brand from an unfamiliar country. Similarly, Hwang and Lin (2010), and Liu and Guo (2016) demonstrated that familiarity with a specific culture or country could positively affect consumer purchase intentions. In consequence, the following hypotheses are stated:

- H<sub>4</sub>: the greater the country familiarity with Peru is, the greater the purchase intention of Peruvian cotton will be.
- H<sub>5</sub>: the greater cotton product familiarity is, the greater the purchase intention of Peruvian cotton will be.

According to a theoretical review, several authors such as Lee and Ganesh (1999), Lin and Chen (2006), Arvola et al. (1999) and Guina and Giraldi (2012) found that at least one of the following variables could positively affect consumer purchase intentions: country image, product image, country familiarity, and product familiarity. As a result, it can be expected that:

- H<sub>6</sub>: the country image of Peru, cotton's product image, country familiarity with Peru, and the cotton's product familiarity used together have a significant effect on the purchase intention of Peruvian cotton.

According to the theoretical framework, figure 1 shows a diagram of the proposed hypotheses.



**Figure 1**

Diagram of the first five hypotheses

Source: own elaboration based on Roth and Romeo (1992).

### 3. Method

The nature of this research was correlational and explanatory (Hernandez Sampieri, Fernández Collado & Baptista Lucio, 2006), using the survey technique to gather the primary data through a closed-question questionnaire which was organized into five sections, adapted from Roth and Romeo's questionnaire (1992). The procedure for selecting countries consisted of identifying and selecting two countries whose inhabitants

have a high or low level of familiarity with Peru, depending on their knowledge of Peru from tourist flow between countries, and the main international markets for Peruvian exports (Verbeke & Vackier, 2004).

The United States (US) is one of the leading destination markets for Peruvian exports, representing 15% of total national exports; and its tourists embody 11% of the total visits of international tourists arriving in Peru. In consequence, US citizens have a high familiarity with Peru. The second sample included France, a country whose citizens have low familiarity with Peru: it represents 0.68% of Peruvian exports, and French tourists make up 2% of all the visits of international tourists arriving in Peru (Trade Map, 2017; Superintendencia Nacional de Migraciones, 2017).

Given that the questionnaire was applied to two countries whose native language was different, English was chosen because this language is a mandatory requirement in the universities of such countries. The size of each sample was 109 cases, with a non-probabilistic sampling method used for convenience.

Notably, the statistical research unit was pre-graduate and post-graduate students, since they are more educated, usually have a higher exposure to travel, as well as to the products and cultural aspects of other countries, and therefore have greater product familiarity and country familiarity. Such a familiarity level of the samples allowed the carrying out of the evaluation between Peruvian cotton and cotton from other countries in the survey and provided more generalizable results (Roth & Romeo, 1992). Similarly, the students were of both sexes because the purchase of cotton is not attributed to people of any particular gender.

A self-administered questionnaire technique was used to survey the selected samples; additionally, a pilot test was conducted for 50 people in total, from both countries, to evaluate the effectiveness and understanding of the questionnaire, as well as the disposition of the questions and answers and the reliability of the variables used. Hence, the wording and understanding of the questionnaire were improved. Peru's country image and cotton's product image variables were measured using a single scale with four identical items (Innovation, Design, Prestige, and Workmanship) based on Roth and Romeo's model (1992).

Additionally, the interval method and semantic differential scale were used to measure the response categories, with responses organized on a seven-point scale (from 1 to 7). Country familiarity, product familiarity, and consumer purchase intention variables were measured using a single item, and a semantic differential scale from 1 to 7, following the guidelines of Roth and Romeo's model (1992). In particular, the semantic differential scale was used due to its simplicity when using administered questionnaires, and the speed in tabulating the information. Kinnear and Tailor (1999) also suggest using the semantic differential scale in marketing research for its ease of application.



## 4. Results

This part is organized into two sections, and the first one shows the preliminary analysis of the samples, reliability results for the multi-item scales, dimensionality results and component matrix for country image scale and cotton product image scale. The second section shows the results and a brief analysis of each hypothesis.

### 4.1 Preliminary analysis

Table 1 shows the gender and age distribution across the samples. No significant association was found between gender and country ( $\chi^2=0.165$ ;  $p=0.684$ ). Concerning the variable age, the homoscedasticity test presented no significant differences (Levene  $F=1.487$ ;  $p=0.224$ ). The t-test for independent samples also found no significant differences between both means ( $t=-1.102$ ;  $p=0.272$ ).

**Table 1**  
Samples distribution according to gender and age.

	France		United States	
Male	58	53%	55	50%
Female	51	47%	54	50%
Total	109	100%	109	100%
18 to 20	31	28%	34	31%
21 to 25	41	38%	31	28%
26 to 30	37	34%	44	40%
Total	109	100%	109	100%

Source: own elaboration.

Descriptive statistics of researched variables are shown in table 2.

**Table 2**  
Descriptive results of the variables.

Item (on a 1 to 7 scale)	France		United States	
	$\bar{X}$	S	$\bar{X}$	S
Innovation (Peru image)	2.12	1.00	2.98	1.36
Design (Peru image)	2.54	1.48	3.36	1.71
Prestige (Peru image)	2.01	1.09	2.95	1.65
Workmanship (Peru image)	2.39	1.31	3.07	1.58
Innovation (Cotton image)	3.76	1.76	4.61	1.83
Design (Cotton image)	3.59	2.07	5.59	1.72
Prestige (Cotton image)	3.58	1.76	5.03	1.65
Workmanship (Cotton image)	4.17	1.91	5.43	1.73
Familiarity with country (Peru)	2.34	1.36	4.36	2.18
Familiarity with product (Cotton)	4.06	2.04	5.42	1.86
Purchase intention (Peruvian Cotton)	2.83	1.75	4.68	2.08

Source: own elaboration.

In order to verify assumptions about Peru's country familiarity variable, a t-test of comparison of means was performed for this

variable. A value  $t=+8.187$  ( $p=0.000$ ) was obtained. This confirms the initial assumption that the USA sample has a Peru country familiarity significantly greater than the French sample. In order to observe the statistical reliability for Peru's country image and cotton's product image scales (table 3), ordinal alpha polychoric was calculated, particularly, it was used two criteria's to confirm the reliability of the scales: (i) ordinal alpha polychoric greater than 0.7 and (ii) item-total correlations greater than 0.4. The values of both statistics satisfied both criteria's.

**Table 3**  
Reliability results for the multi-item scales.

	Country image of Peru scale Ordinal alpha polychoric = 0.836		Cotton product image scale. Ordinal alpha polychoric = 0.797	
	Corrected item-total correlation	Alpha if item deleted	Corrected item-total correlation	Alpha if item deleted
Innovation	0.699	0.841	0.622	0.804
Design	0.697	0.839	0.695	0.772
Prestige	0.805	0.791	0.642	0.795
Workmanship	0.686	0.842	0.684	0.777

Source: own elaboration.

Tables 4 shows the dimensionality results for country image and product image variables; the variance explained by the first factor is higher than 50% for both. This first factor represents the unique one that has an eigenvalue higher than one. Moreover, the variance explained by the second factor is not much greater than that explained by the third factor. Table 5 shows items' factor loadings in the first factor. They all are higher than 0.80 and reach their maximum value in this first factor; hence, it is evidence that the country image and product image are one-dimensional variables (Carmines & Zeller, 1979).

**Table 4**  
Dimensionality results for country image scale and cotton product image scale.

Component	Country image scale			Cotton product image scale		
	Total	Variance	Cumulative	Total	Variance	Cumulative
1	2.88	71.89%	71.89%	2.66	66.50%	66.50%
2	0.49	12.30%	84.20%	0.51	12.79%	79.29%
3	0.38	9.54%	93.73%	0.44	10.91%	90.20%
4	0.25	6.27%	100%	0.39	9.80%	100%

Source: own elaboration.

**Table 5**

Component matrix for country image scale and cotton product image scale (1 component extracted).

Country image scale		Cotton product image scale	
Item	Component 1	Item	Component 1
Innovation (country image of Peru)	0.832	Innovation (Cotton product image)	0.804
Design (country image of Peru)	0.834	Design (Cotton product image)	0.772
Prestige (country image of Peru)	0.901	Prestige (Cotton product image)	0.795
Workmanship (country image of Peru)	0.823	Workmanship (Cotton product image)	0.777

Source: own elaboration.

#### 4.2. Study of the hypothesis

Relative to the study of  $H_1$ , table 6 shows that Peru's country image is not significantly associated with cotton's product image in the French sample ( $r=+0.133$ ;  $p=0.168$ ). In contrast, such an association is significant and positive in the US sample ( $r=+0.261$ ;  $p=0.006$ ). Therefore, Peru's country image is directly associated with cotton's product image when the foreign consumer has a high level of familiarity with Peru.

**Table 6**

Summary of the  $H_1$ .

Pairs:	Correlation		p-values	
	French sample	US sample	French sample	US sample
1) Peru country image 2) Cotton's product image	0.133	0.261	0.168	0.006**

Source: own elaboration.

\*\*Significant correlation at 5%.

Subsequently, the results of  $H_2$  show that Peru's country image is significantly and directly associated with the purchase intentions of Peruvian cotton, in the French sample ( $r=+0.258$ ;  $p=0.007$ ) as well as in the US sample ( $r=+0.362$ ;  $p=0.000$ ) (table 7). Hence, Peru's country image is positively associated with purchase intentions of Peruvian cotton whether the foreign consumer has a high or low level of familiarity with Peru.

**Table 7**

Summary of the  $H_2$ .

Pairs:	Correlation		p-values	
	French sample	US sample	French sample	US sample
1) Peru country image 2) Purchase intention of Peruvian cotton	0.258	0.362	0.007**	0.000**

Source: own elaboration.

\*\*Significant correlation at 5%.

Concerning  $H_3$ , table 8 shows that cotton's product image variable is not significantly related to the purchase intention of Peruvian cotton in the French sample ( $r=+0.157$ ;  $p=0.103$ ). However, it is significant and positive in the case of the US sample ( $r=+0.103$ ;  $p=0.000$ ): cotton's product image is directly associated with the purchase intention of Peruvian cotton, only when the foreign consumer has a high level of familiarity with Peru.

**Table 8**  
Summary of the  $H_3$ .

Pairs:	Correlation		p-values	
	French sample	US sample	French sample	US sample
1) Cotton's product image 2) Purchase intention of Peruvian cotton	0.157	0.436	0.103	0.000**

Source: own elaboration.

\*\*Significant correlation at 5%.

Similarly, the results of  $H_4$  indicate that the correlation between country familiarity with Peru and the purchase intention of Peruvian cotton is significant and direct, in the French sample ( $r=+0.234$ ;  $p=0.014$ ) as in the case of the US sample ( $r=+0.338$ ;  $p=0.000$ ). In consequence, country familiarity with Peru is directly associated with the purchase intention of Peruvian cotton, when the foreign consumer has high or low level of familiarity with Peru (table 9).

**Table 9**  
Summary of the  $H_4$ .

Pairs:	Correlation		p-values	
	French sample	US sample	French sample	US sample
1) Familiarity with Peru 2) Purchase intention of Peruvian cotton	0.234	0.338	0.014**	0.000**

Source: own elaboration.

\*\*Significant correlation at 5%.

According to the results of  $H_5$ , the association between cotton product familiarity and purchase intention of Peruvian cotton is significant and direct, in the French sample ( $r=+0.161$ ;  $p=0.094$ ), and the US sample ( $r=+0.538$ ;  $p=0.000$ ).

As a result, cotton product familiarity is significantly associated with purchase intention of Peruvian cotton, for foreign consumers with a low or high level of familiarity with Peru (table 10).

**Table 10**  
Summary of the  $H_5$ .

Pairs:	Correlation		p-values	
	French sample	US sample	French sample	US sample
1) Cotton's product familiarity. 2) Purchase intention of Peruvian cotton	0.161	0.538	0.094	0.000**

Source: own elaboration.

\*\*Significant correlation at 5%.

To test  $H_6$ , the following regression equation was formulated:

$$\begin{aligned} \text{Intent to purchase cotton from Peru} = & \text{Constant} + \beta_1 * \\ & \text{Cotton product familiarity} + \beta_2 * \text{Country familiarity with Peru} + \beta_3 * \\ & \text{Country image of Peru} + \beta_4 * \text{Cotton product image} + \text{error} \end{aligned} \quad (1)$$

Where:

- $\beta_1$  = Regression coefficient of cotton product familiarity,
- $\beta_2$  = Regression coefficient of country familiarity with Peru,
- $\beta_3$  = Regression coefficient of country image of Peru,
- $\beta_4$  = Regression coefficient of cotton product image.

The regression equation shows that the dependent variable is the purchase intention of Peruvian cotton, and the independent variables are 1) cotton's product familiarity, 2) country familiarity with Peru, 3) Peru's country image, and 4) cotton's product image. These variables have a quantitative nature; therefore intro method was used to regression analysis. Its purpose was to identify which independent variables are significant to explain purchase intention of Peruvian cotton. It defines the null hypothesis  $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ .

Before carrying out the regression analysis, multicollinearity and presence of outliers were examined through several tests. As a result, the studied models did not present extreme cases or multicollinearity issues in any of the samples. In the French sample,  $R^2$  corrected was 0.106, and variance explained by the regression model was significant ( $F=4.186$ ;  $p=0.003$ ). In consequence, the null hypothesis ( $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ ) is not accepted in the French sample.

This means that not all beta coefficients of the regression model are zero. Regression coefficients indicate that in the French sample null hypothesis is not accepted for Peru's country image ( $B_3=0.120$ ;  $p=0.011$ ): this is a significant variable to explain purchase intention of Peruvian cotton. This relation is direct since it was found that  $\beta_3 > 0$ . In contrast, cotton product familiarity ( $B_1=0.110$ ;  $p=0.204$ ), familiarity with Peru ( $B_2=0.236$ ;  $p=0.052$ ) and cotton product image ( $B_4=0.024$ ;  $p=0.434$ ) are not significant variables to explain purchase intention of Peruvian cotton. Hence, it is concluded that  $\beta_1=0$ ,  $\beta_2=0$ , and  $\beta_4=0$  (table 11).

**Table 11**

Significance of the regression coefficients for the purchase intention of Peruvian cotton (French sample).

Variable	Non-standardized coefficients		Typified coefficients	t	Sig.
	B	Typified error	Beta		
(Constant)	0.384	0.654		0.587	0.558
Cotton product familiarity	0.110	0.086	0.129	1.277	0.204
Peru country familiarity	0.236	0.120	0.184	1.968	0.052
Country image of Peru	0.120	0.046	0.243	2.580	0.011
Cotton product image	0.024	0.031	0.078	0.786	0.434

Source: own elaboration.

On the other hand, US sample regression results show that  $R^2$  corrected is 0.358, and the explanatory variables significantly explain the purchase intention of Peruvian cotton ( $F=16.051$ ;  $p=0.000$ ). As a result, the null hypothesis is not accepted ( $H_0: \beta_1=\beta_2=\beta_3=\beta_4=0$ ); all beta coefficients of the regression model are not zero. Regression coefficients indicate that in the US sample, the null hypothesis is not accepted for cotton's product familiarity variable ( $B_1=0.442$ ;  $p=0.000$ ) and cotton's product image ( $B_4=0.081$ ;  $p=0.015$ ).

As a result, it can be seen that such variables significantly affect the purchase intention of Peruvian cotton. This relation is direct given that  $\beta_1 > 0$  and  $\beta_4 > 0$ . In contrast, familiarity with Peru ( $B_2=0.069$ ;  $p=0.459$ ) and country image of Peru ( $B_3=0.063$ ;  $p=0.088$ ) are not significant variables to explain purchase intentions of Peruvian cotton. It is concluded that  $\beta_2=0$  and  $\beta_3=0$  (table 12).

**Table 12**

Significance of the regression coefficients for the purchase intention of the Peruvian cotton (US Sample).

Variable	Non-standardized coefficients		Typified coefficients	t	Sig.
	B	Typified error	Beta		
(Constant)	-0.355	0.687		-0.518	0.606
Cotton product familiarity	0.422	0.099	0.379	4.268	0.000
Peru country familiarity	0.069	0.092	0.072	0.743	0.459
Country image of Peru	0.063	0.037	0.165	1.721	0.088
Cotton product image	0.081	0.033	0.215	2.479	0.015

Source: own elaboration.

There are notable differences between the significant variables and those that are not significant, from one sample to the other. Thus, when the four variables are analyzed together to explain the purchase intention of Peruvian cotton, it was found that the country image of Peru ( $p=0,011$ ) is significant at a 5% level of significance in the French sample,



and at a 10% level of significance ( $p=0,088$ ) in the U.S. sample. Therefore, the country image of Peru can explain the purchase intention of Peruvian cotton in both samples.

## 5. Conclusions

H<sub>1</sub> (the better the country image of Peru is, the better cotton's product image is) should be accepted in cases when

the foreign consumer has a high level of familiarity with Peru, and it should not be accepted for the cases when familiarity is low. It means that when the studied sample has a high level of familiarity with Peru, they have a positive perception of Peru and cotton from Peru (Lee & Ganesh, 1999; Roth & Romeo, 1992). However, Roth and Romeo (1992) concluded to the contrary that the level of country familiarity does not affect image perceptions. This study suggests that the level of country familiarity works as a moderator variable between country image and product image. The practical implication is that Peruvian cotton exporters could innovate their global marketing strategies using the country image of Peru to improve cotton product image positioning, especially for American consumers or markets with a high level of familiarity with Peru.

Regarding H<sub>2</sub> (the better the country image of Peru is, the higher the purchase intention of Peruvian cotton will be), it should be widely accepted, in cases when the foreign consumer has a low or high level of familiarity with Peru. Such a result is coherent as found in H<sub>6</sub>, since when the four variables were studied together to explain purchase intention, it was found that the country image of Peru was significant in both samples. In consequence, the country image of Peru can be the main factor to stimulate the purchase intention of Peruvian cotton in markets with a high or low level of familiarity with Peru. Hence, foreign consumers could perceive that Peru can produce high-quality cotton in comparison with other countries.

The theoretical implication of such a finding is that it would seem that international consumers perceive that a developing country such as Peru can produce an agricultural product such as cotton with positive attributes like high-quality. This possible conclusion is different from that proposed by Balabanis and Diamantopoulos (2004) who suggested that products from developing countries such as Peru are supposed to be of inferior quality relative to those from developed countries. This could be mistaken if the developing country produces agricultural products since they can be well-perceived by international consumers like Peruvian cotton.

The practical implication is that companies exporting cotton from Peru could use Peru's country brand as an umbrella brand to export their products, and use it in international fairs, web pages, data sheets and other strategic information that highlights the cotton's country of origin. The country image could be used in global marketing strategies for agricultural

products from developing countries to encourage purchase intentions of international consumers.

H<sub>3</sub> (the better cotton's product image is, the higher the purchase intention of Peruvian cotton will be) should be accepted in cases when the foreign consumer has a high level of familiarity with Peru; in contrast to when the level of familiarity with Peru is low. Such a result is different from that found by Roth and Romeo (1992), who postulated that familiarity differences do not affect the relation between product image and purchase intention. Furthermore, according to H<sub>6</sub>, cotton product image positively influences the purchase intention of Peruvian cotton only when the consumer has a high level of familiarity with Peru.

The results may indicate that the level of familiarity with Peru can contribute to shaping consumer perceptions about cotton's product image and its evaluation, meaning that familiarity differences affect the relation between product image and purchase intention. Hence, the level of country familiarity could work as a moderator variable between the product image and purchase intention. Two possible marketing applications are that Peruvian cotton exporters could 1) reposition cotton's image as a high-quality product, highlighting its attributes such as fiber length, strength, elongation, brightness, and others; and 2) use cotton's product image ingeniously through promotion policies, online campaigns, websites, trade fairs, and others, in the United States or markets with a high level of familiarity with Peru.

As regards to H<sub>4</sub> (the better the country familiarity with Peru variable is, the higher the purchase intention of Peruvian cotton will be), it has been concluded that there is a full acceptance of it, in cases when the foreign consumer has a high or low level of familiarity with Peru. However, according to H<sub>6</sub>, country familiarity with Peru positively affects the purchase intention of Peruvian cotton only when the consumer has a low level of familiarity with Peru. In consequence, the level of country familiarity with Peru can predict the purchase intention of Peruvian cotton only when the consumer has a low level of familiarity with Peru.

This finding is comparable and similar to that found by Guina and Giraldi (2012) who concluded that a greater level of product familiarity is positively related to consumer purchase intention. However, this study demonstrated that this is true particularly when the consumer has a low level of familiarity with the country of origin of such a product. A possible explanation is that if the consumers have a high level of familiarity with Peru and they increase their knowledge or experiences relative to Peru or develop more country familiarity with Peru, their purchase intention of Peruvian cotton could not increase since they are already familiar with the country. Hence, country familiarity does not have explanatory power when the consumers are already familiar with the country in question.

The practical implication is that Peruvian cotton exporters should focus their sales and marketing strategies on American consumers since they are more familiar with Peru; hence, the costs of educating consumers about Peru are lower than in the French market. However, if they have

the budget to educate consumers from France or other countries with less country familiarity, they could create marketing strategies to educate them about Peruvian history, local Peruvian producers of cotton, and other information about Peru.

Relative to H<sub>5</sub> (the better cotton product familiarity is, the higher the purchase intention of Peruvian cotton will be), it should be accepted in cases where the foreign consumer has a high or low level of familiarity with Peru. However, according to H<sub>6</sub>, cotton product familiarity positively affects the purchase intention of Peruvian cotton only when the consumer has a high level of familiarity with Peru. In consequence, the level of cotton product familiarity can predict the purchase intention of Peruvian cotton when the consumer has a high level of familiarity with Peru. Both findings are complementary since H<sub>5</sub> was accepted in the French sample at a 10% level of significance and in the American sample at 5%. This means that cotton product familiarity cannot be the primary variable to foster the purchase intention of Peruvian cotton when the international consumer has a low level of familiarity with Peru. Authors such as Han (1989), Arvola et al. (1999) and Guina and Giraldi (2012) concluded remarkable results; furthermore they suggested that product familiarity is a crucial variable to achieve a positive evaluation and stimulate consumer purchase intentions. However, this study has demonstrated that product familiarity is a crucial variable mainly when the consumer has a high level of familiarity with the country of origin of the product. A possible explanation is that consumers with a high level of familiarity with Peru are more educated to purchase a product that comes from Peru; hence, the product image is more favorably perceived and the intention to purchase it. The practical recommendation is that Peruvian cotton exporters could modernize their marketing strategies by educating consumers about the properties, attributes, and benefits of Peruvian cotton in order to encourage their purchase intention, especially when the target market has a high level of familiarity with Peru.

When the four variables were studied together to explain purchase intention, it was found that the country image of Peru is a significant factor, in both samples. Hence, there is not enough evidence to accept H<sub>6</sub> (the country image of Peru, cotton's product image, country familiarity with Peru, and the cotton's product familiarity used together have a significant effect on the purchase intention of Peruvian cotton). However, Peru's country image positively affects the purchase intention of Peruvian cotton in both samples. As mentioned previously, this finding can be complemented by the full acceptance of H<sub>2</sub> (the better the country image of Peru is, the higher the purchase intention of Peruvian cotton will be). Similarly, each regression variable was studied via correlational analysis, and both studies are complementary to better understand the behavior of studied variables.

As a result, the relationships between Peru's country image, cotton's product image, country familiarity with Peru and cotton's product familiarity with the purchase intention of Peruvian cotton are heterogeneous along with both samples. Hence, the level of familiarity is a

moderator variable in such relationships, and global marketing strategies should be adapted to the market based on the level of familiarity.

One of the leading research limitations was the non-probabilistic sampling method, restricting the conclusions to the examined samples. Additionally, given that the size of the sample was small, the consumer's purchase intention according to gender, age, and socioeconomic level of the consumers studied was not analyzed. Another research limitation was using multidimensional constructs only for country image and product image variables, while the others were unidimensional; hence, it is suggested that future researchers might design multidimensional constructs for the studied variables using structural equations to test the model.

## References

- Alba, J., & Hutchinson, J. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(4), 411-454. <https://doi.org/10.1086/209080>
- Amine, L., Chao, M., & Arnold, M. (2005). Executive insights: exploring the practical effects of country of origin, animosity, and price-quality issues: two case studies of Taiwan and Acer in China. *Journal of international marketing*, 13(2), 114-150. <https://doi.org/10.1509/jimk.13.2.114.6485>
- Arvola, A., Lahteenmaki, L., & Tuorila, H. (1999). Predicting the Intent to Purchase Unfamiliar and Familiar Cheeses: The Effects of Attitudes, Expected Liking and Food Neophobia. *Appetite*, 32(1), 113-126. <https://doi.org/10.1006/appe.1998.0181>
- Balabanis, G., & Diamantopoulos, A. (2004). Domestic country bias, country of origin effects and consumer ethnocentrism: a multidimensional unfolding approach. *Journal of the Academy of Marketing Science*, 32(1), 80-95. <http://doi.org/10.1177/0092070303257644>
- Brucks, M. (1985). The effect of product class knowledge on information search behavior. *Journal of Consumer Research*, 12(1), 1-16. <https://doi.org/10.1086/209031>
- Bruwer, J., Buller, C., Saliba, A. J., & Li, E. (2014). Country-of-origin (COO) brand loyalty and related consumer behaviour in the Japanese wine market. *International Journal of Wine*, 26(2), 97-119. <https://doi.org/10.1108/IJWBR-05-2013-0020>
- Cadenillas, A. (2016). Thirteen products that carry red and white to different markets around the world. Retrieved on 15-jan-2019 from: Retrieved on 15-jan-2019 from: <https://diariocorreo.pe/gastronomia>
- Calderón, R., Leyva, V., Miranda, M. A., & Pais, C. (2017). Strategic Management on Textile sector. Master on Strategic Management thesis. Lima, Peru: Pontificia Universidad Católica del Perú. Retrieved on 15-jan-2019 from: Retrieved on 15-jan-2019 from: <http://tesis.pucp.edu.pe/repositorio/bitstream/handle/123456789/9002/>
- Carmines, E., & Zeller, R. (1979). Reliability and Validity Assessment. Sage University Paper series on Quantitative Applications in the Social Sciences. Newbury Park: Sage Publications. <https://doi.org/10.1108/IJWBR-05-2013-0020>

- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention. *Online Information Review*, 32(6), 818-841. <https://doi.org/10.1108/14684520810923953>
- Esteve-Turrillas, F. A., & de la Guardia, M. (2017). Environmental impact of Recover cotton in textile industry. *Resources, Conservation and Recycling*, 116, 107-115. <http://dx.doi.org/10.1016/j.resconrec.2016.09.034>
- Guina, F., & Giraldi, J. (2012). The role played by country knowledge and product familiarity in the countr of origin effect: A study of Brazilian beef in Europe. *GCG: Revista de Globalización, Competitividad y Governabilidad*, 6(2), 81-94. <http://dx.doi.org/10.3232/GCG.2012.V6.N2.05>
- Gyftou, P., Pavlatou, E. A., Spyrellis, N., & Hatz, K. S. (2000). Nickel Matrix Composite Coatings: Application in Textile Machinery and Evaluation of Cotton Products Quality. *The International Journal of Surface Engineering and Coatings*, 78(6), 223-226. <https://doi.org/10.1080/00202967.2000.11871345>
- Han, C. (1989). Country Image: Halo or Summary Construct? *Journal of Marketing Research*, 26(2), 222-229. <http://dx.doi.org/10.2307/3172608>
- Han, C. (1990). Testing the role of country image in consumer choice behaviour. *European Journal of Marketing*, 24(6), 24-40. <http://dx.doi.org/10.1108/EUM00000000000609>
- Han, M., & Lee, B. (1994). The choice of a survey mode in country image studies. *Journal of business research*, 29(2), 151-161. [https://doi.org/10.1016/0148-2963\(94\)90019-1](https://doi.org/10.1016/0148-2963(94)90019-1)
- Hernandez Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2006). *Metodología de Investigación*. Santa Fe, México: Mc-Graw Hill.
- Hong, T., & Wyer, R. (1989). Effects of country-of-origin and product-attribute information on product evaluation: an information processing perspective. *Journal of Consumer Research*, 16(2), 75-87. <https://doi.org/10.1086/209206>
- Huy, H., & Svein, O. (2012). Certainty, risk and knowledge in the satisfaction-purchase intention relationship in a new product experiment. *Asia Pacific Journal of Marketing and Logistic*, 4(1), 78-101. <https://doi.org/10.1108/13555851211192713>
- Hwang, J., & Lin, T.-N. (2010). Management Effects of Food Neophobia, Familiarity, and Nutrition Information on Consumer Acceptance of Asian Menu Items. *Journal of Hospitality Marketing & Management*, 19(2), 171- 187. <https://doi.org/10.1080/19368620903455286>
- Imelia, R., & Ruswanti, E. (2017). Factors Affecting Purchase Intention of Electronic House wares in Indonesia. *International Journal of Business and Management Invention*, 6(2), 37-44.
- Institute of economic and social studies. (2016). Textile products industry. Retrieved on 15-jan-2019 from: <http://www.sni.org.pe/wp-content/uploads>
- Kaynak, E., & Kucukemiroglu, O. (1992). Sourcing of Industrial Products: Regiocentric Orientation of Chinese Organizational Buyers. *European Journal of Marketing*, 26(5), 36. <https://doi.org/10.1108/03090569210014406>



- Khan, I., Ghauri, T., & Majeed, S. (2012). Impact of Brand related attributes on purchase intention of consumers. *Journal of Contemporary Research in Business*, 4(3), 194-200.
- Kim, H.-S., Shin, E.-Y., Cheng, A., Lennon, S. J., & Liu, W.-S. (2015). Influence of design, workmanship, and familiarity on perceptions of country-of-origin apparel brands: A study of consumers in the US, China and Japan. *Journal of Global Fashion Marketing*, 6(4), 265-277. <https://doi.org/10.1080/20932685.2015.1070682>
- Kinney, T. C., & Taylor, J. R. (1999). *Investigación de mercados: un enfoque aplicado*. (5ta ed.). Bogotá: McGraw-Hill.
- Lee, D., & Ganesh, G. (1999). Effects of partitioned country image in the context of brand image and familiarity. A categorization theory perspective. *International Marketing Review*, 16(1), 18-39. <https://doi.org/10.1108/02651339910257610>
- Li, D., Ahn, J.-S., Zhou, R., & Wu, B. (2009). A Study on the influence of country image on purchase intention of Chinese consumers based on Fishbein's model of reasoned action: Focused on USA, Germany, Japan and South Korea. *Frontiers of Business Research in China*, 3(4), 621-646. <https://doi.org/10.1007/s11782-009-0030-2>
- Li, X., Yang, J., Wang, X., & Lei, D. (2012). The impact of country-of-origin image, consumer ethnocentrism, and animosity on purchase intention. *Journal of Software*, 7(10), 2263-2268. <https://doi.org/10.4304/jsw.7.10.2263-2268>
- Lin, C.-H., & Kao, D. T. (2004). The Impacts of Country-of-Origin on Brand Equity. *Journal of American Academy of Business*, 150(15), 37-40.
- Lin, L., & Chen, C. S. (2006). The influence of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions: an empirical study of insurance and catering services in Taiwan. *Journal of Consumer Marketing*, 23(5), 248-265. <https://doi.org/10.1108/07363760610681655>
- Liu, D., & Guo, X. (2016). Can trust and social benefit really help? Empirical examination of purchase intentions for wearable devices. *Information Development*, 33(1), 43 - 56. <https://doi.org/10.1177/0266666916635724>
- Madahi, A., & Sukati, I. (2012). The effect of external factors on purchase intention amongst young generation in malaysia. *International Business Research*, 5(8), 153-159. <https://doi.org/10.5539/ibr.v5n8p153>
- Mallqui, O., Quispe, E., & Rabanal, V. (2017). Algodón orgánico como elemento clave de una estrategia de diferenciación, orientada a la exportación para el sector textil confecciones en el Perú. Bachelor thesis. Lima, Peru: Universidad Peruana de Ciencias Aplicadas.
- Marks, L., & Olson, J. (1981). Toward a Cognitive Structure Conceptualization of Product Familiarity. In K.B. Monroe & A. A. MI. (Eds), *Advances in Consumer Research* (145-150). Duluth: Association for Consumer Research.
- Ministry of agriculture and irrigation. (s.f.). *Ministry of agriculture and irrigation: Cotton Technology*. Retrieved 02-jun-2018 from: Retrieved 02-jun-2018 from: <http://www.inia.gob.pe/>



- Ortiz, R. (2014). El efecto de la imagen del país de origen y la personalidad de marca en la intención de compra: Un estudio transcultural. Doctoral thesis. Gurabo, Puerto Rico: ProQuest.
- Papadopoulos, N., & Heslop, L. (2000). *A Cross-national and Longitudinal Study of Product-country Images with a Focus on the U.S. and Japan*. Massachusetts: Marketing Science Institute.
- Phau, I., & Suntornnond, V. (2006). Dimensions of consumer knowledge and its impacts on country of origin effects among Australian consumers: a case of fast-consuming product. *Journal of Consumer Marketing*, 23(1), 34-42. <https://doi.org/10.1108/07363760610641145>
- Roth, M., & Romeo, J. (1992). Matching Product Category and Country Image Perceptions: A Framework for Managing Country-of-origin Effects. *Journal of International Business Studies*, 23(3), 477-497. <https://doi.org/10.1057/palgrave.jibs.8490276>
- Silva, C. A. (2005). Algodón Genéticamente Modificado. Retrieved 02-jun-2018 from: Retrieved 02-jun-2018 from: <http://www.argenbio.org/ad/uploads/pdf>
- Sinrungtam, W. (2013). Impact of Country of Origin Dimensions on Purchase Intention of Eco Car. *International Journal of Business and Management*, 8(11), 51-62. <https://doi.org/10.5539/ijbm.v8n11p51>
- Superintendencia Nacional de Migraciones. (2017). Movimientos migratorios de ingreso y salida, ciudadanos extranjeros según país de procedencia para el periodo 2011-2016. Lima, Perú.
- Trade Map. (2016). Search of the main cotton exporters in Trade Map data base. Lima: International Trade Center.
- Trade Map. (2017). Trade Map: Búsqueda del comercio bilateral entre Perú con Estados Unidos y Francia. Lima: International Trade Center .
- Urbonavicius, S., Dikcius, V., & Navickaite, S. (2011). Country Image and Product Evaluations: Impact of a Personal Contact with a Country. *Inzinerine Ekonomika-Engineering Economics*, 22(2), 214-221. <http://dx.doi.org/10.5755/j01.ee.22.2.318>
- Verbeke, W., & Vackier, I. (2004). Profile and effects of consumer involvement in fresh meat. *Meat science*, 67(1), 159-168. <https://doi.org/10.1016/j.meatsci.2003.09.017>
- Wang, X., & Yang, Z. (2008). Does country of origin matter in the relationship between brand personality and purchase intention in emerging economies? *International Marketing Review*, 25(4), 458-474. <https://doi.org/10.1108/02651330810887495>
- Zbib, I., Wooldridge, B., Ahmed, Z., & Benlian, Y. (2010). Purchase of global shampoo brands and the impact of country of origin on Lebanese consumers. *Journal of Product & Brand Management*, 19(4), 261-275. <https://doi.org/10.1108/10610421011059586>

## Notes

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