Region of origin of product and regional appeal of celebrity in food purchase

Região de origem do produto e apelo regional de celebridade na compra de alimentos

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Abstract

Objective: Many studies show factors that have a positive impact on the intention to buy food, including the presence of stamps and certified and the endorsement of celebrities, both in isolation and combined with other factors. When it comes to studies that analyze the effects that both factors can have on the purchasing and consumer confidence, the number of studies in the national and international literature becomes incipient. This research aimed to identify the effects of the product origin region (POR) and the Regional Celebrity Appeal (RCP) on

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the confidence and intention to purchase food. Design/methodology/approach: A descriptive and inferential quantitative approach was used, using experimental research as a research strategy. Findings: From the theoretical point of view, even pointing out that the presence of stamps and certificates and endorsement of celebrity exert direct influence on trust and purchase intention, the research shows that there is no interaction between these constructs when it comes to commodities, indicating that other elections should be considered. Originality/value: The results found show that even if the presence of identification of the region of origin of the product or the endorsement of celebrity congruent with the region generate an identification in the consumer towards the product, this junction is not sufficient when analyzing the intention to purchase food products in the category of commodities. Thus, the empirical look suggests that, when analyzing the confidence and intention to purchase other products, such as artisanal food products, which naturally carry a greater relationship with the region where they are produced, these results may be different, more prone to established relationships, generating greater statistical significance.

**Keywords:** Food Consumption. Region of Origin. Regional Celebrity Appeal. Intent to Purchase. Trust.

**Resumo**

Objetivo: Muitos estudos mostram fatores que têm um impacto positivo na intenção de comprar alimentos, incluindo a presença de selos e certificados e o endosso de celebridades, tanto isoladamente como em conjunto com outros fatores. Quando se trata de estudos que analisam os efeitos que ambos os fatores podem ter sobre a compra e a confiança do consumidor, o número de estudos na literatura nacional e internacional torna-se incipiente. Esta investigação teve por objetivo identificar os efeitos da região de origem do produto (POR) e do apelo regional às celebridades (RCP) sobre a confiança e a intenção de comprar alimentos. Design/metodologia/abordagem: Foi utilizada uma abordagem quantitativa descritiva e inferencial, usando a pesquisa experimental como estratégia de pesquisa. Constatações: Do ponto de vista teórico, mesmo ressaltando que a presença de carimbos e certificados e aval de celebridades exercem influência direta sobre a confiança e a intenção de compra, a pesquisa mostra que não há interação entre essas construções quando se trata de commodities, indicando que outras eleições devem ser consideradas. Originalidade/valor: Os resultados encontrados mostram que mesmo que a presença da identificação da região de origem do produto ou o endosso de celebridades congruentes com a região gerem uma identificação do consumidor em relação ao produto, essa junção não é suficiente ao analisar a
intenção de comprar alimentos na categoria de commodities. Assim, o olhar empírico sugere que, analisando a confiança e a intenção de comprar outros produtos, como os alimentos artesanais, que naturalmente carregam maior relação com a região em que são produzidos, esses resultados podem ser diferentes, mais propensos a relações estabelecidas, gerando maior significância estatística.


**Introduction**

The increase in world trade associated with globalization has made the purchasing decision-making process more complex for consumers, who now need to decide between domestic products and imported alternatives (Dmitrovic et al., 2009), or between brands of local origins and those of great national recognition. Thus, in this context of increasingly competitive modern markets, the use of products accompanied by signs, such as brands, celebrity support and geographical identifications, has become a strong ally in adding value (Trentini & Sae, 2009) and greater competitive advantage, also acting as a parameter of product quality (Dossin et al., 2019).

However, when talking about the presence of stamps and certificates of origin, so that the maximization of the perception of product quality is achieved, this will depend, in this context, on the perceived image of the country or region in which it is produced (Yeh, Chen, & Sher, 2010), or when talking about the endorsement made by celebrity, where it needs to have a certain degree of coherence with the product in question. Thus, the alignment between the product and the reputation that the country or place of origin has is essential to avoid negative effects on consumer perception (Lampert & Jaffe, 1998). In this sense, research was conducted to obtain more consistent results on the country-of-origin effect on the consumer’s purchasing decision, deepening the studies in places with greater geographical and sociocultural homogeneity, such as states, cities and regions (Dossin et al., 2019).

It is in this context that the concept of effect of the region of origin arises (Luceri, Latusi, & Zerbini, 2016), where the authors state that identifying the origin of the region gives greater value to products, recognizing the importance of geographical indications and their variations, such as Designations of Origin (DOs) and Controlled Designation of Origin (DOC) in the valorization of typical regional products (Chamorro, Rubio, & Miranda, 2015).
According to Hanzaee and Khosrozadeh (2011), when the country-of-origin effect is being presented along with other factors of relevance to the consumer, this action can exert a positive influence on the confidence and purchase intention of the product in question (Dossin et al., 2019). In the case of this research, the second factor of relevance to the consumer is the endorsement of celebrity congruent with the product region.

Celebrity endorsement is a widespread theme addressed in marketing studies, and many authors claim that products and brands that are endorsed by celebrities have a greater tendency to draft more confidence and be chosen by consumers than those who do not have the endorsement (Boyd & Shank, 2004). However, the work that addresses as a factor of reinforcement to the celebrity's endorsement is still incipient, its congruence with the region of the endorsed product/service, especially about products and brands not yet so recognized, since they tend to need a greater reinforcement because they do not have such recognition (Silva et al., 2012).

The relevance and originality of this research consists in presenting the combination of relevance factors not previously found – the identification of the region of origin linked to celebrity endorsement with a focus on regional appeal, to identify the intention and confidence of consumers when addressing the intention to purchase food. This combination of factors creates a specific lens for analyzing the phenomenon, since it addresses the representativeness of the celebrity, the direct identification of the consumer with it and the relevance and credibility of the region of origin as influencers of the confidence and intention to purchase food products.

Thus, in view of the context presented, this paper aims to investigate the influences that the presence of the identification of the region of origin and the endorsement of celebrity with regional appeal exert on the confidence and intention to purchase locally produced products, especially food. In the following sessions, the theoretical bases that support the hypotheses generated and the research are presented, as well as the theoretical model, the methodology, the experiment, the analysis of the results, discussions and final considerations.

**Theoretical Framework**

**2.1 Purchase of Locally Produced Products**

The intention to purchase locally produced products is established as the consumer's inclination to purchase a particular product that has a direct link to its region of origin. Akdeniz
Ar and Kara (2014) show the positive relationship that exists between the locality of origin of a brand or product, the credibility generated to the consumer, with the intention of consuming it, establishing a certain customer trust in the brand. In addition, authors such as Nijssen and Herk (2009) observe that the relationship between consumer satisfaction and trust is highlighted by the favorable perception of the country/place of origin effect, especially in the purchase of products with low emotional involvement, serving as a reinforcement to the choice made.

When the consumer is inclined to buy locally produced products, there are factors that can influence their decision, ranging from rational to hedonic conditions, in a relationship often shrouded in representativeness. At the beginning of the 20th century, Émile Durkheim proposed the understanding of collective representativeness, indicating categories of thought that elucidate the states of collectivity. Later, Oliveira (2004) reinforces the concept through the understanding that in every social interaction there is the production and exchange of meanings, and this helps to establish cultural or collective representations – rules and conventions.

This mutual generation of meanings becomes stronger in products that already bring with them a genuine representation, such as products identified with D.O. (Designation of Origin) or C.D.O. (Controlled Designation of Origin), for example, which reinforce the purchase process by basing three evaluation states: cognitive (Hauser, Jonas, & Riemann, 2011), affective (Obermiller & Spangenberg, 1989) and normative (Fernández-Ferrín & Bande-Vilela, 2013), leading the consumer by an evaluation ranging from external aspects, sympathy for the product to ethnocentrism, reinforcing aspects of representativeness, which can still be extended to the presence of celebrities coo endorsing.

In addition, the purchase of food products can be considered as low emotional involvement, since their consumption is short-term, and even if it has a high value, consumers tend to evaluate the products by the information contained on the label to make their decisions (Verbeke & Ward, 2006). As elements present in the labels, one can consider the identification seal of the country or region of origin of the good and the endorsement of celebrities as examples of attributes that increase confidence and can elevate the purchase intention. Thus, this experiment aims to identify how the trust and purchase intention of consumers is positively influenced by the presence of product origin identification stamps and the endorsement of a celebrity with regional appeal.
2.2 Product Region of Origin Identification

The concept of identification of the region of origin of the product can be understood primarily from the perspective of the country of origin effect, which is an information external to the merchandise, an intangible attribute that is distinguished from its physical and organic characteristics (Mehmet, Pirtini, & Erdem, 2010), as well as its quality and brand image has (Maheswaran, 1994), having the ability to reposition or introduce more forcefully competitive products in competitive markets. Just as the brand image is worked by organizations, authors such as Ademais, Biehal and Sheinin (1998) affirm that the image of the country of origin should be worked based on the same steps: through advertising and packaging. Whenever positive, the country's image should be used as a resource to promote the product, and when negative, it should be avoided to the maximum to transfer distorted traces of quality and trust (Lampert & Jaffe, 1998).

The importance of identifying the region of origin related to the perception of quality and also reliability of the product is related to the fact that, according to Steenkamp (1990), for consumers, the perceived quality is associated with what they hope the product will confer on them, and the country or region can be a potentiator of this quality and generate more confidence about the product and increase the intention to buy it. This importance is present in the works of Chéron and Propeck (1997) and Kabadayi and Lerman (2011), and Andéhn and Decosta (2016) affirm the influence existing in the strength of brand association with the country in the evaluation of consumers, that is, the link that the consumer sees between the brand and the country influences the evaluation of the product.

In this context, Verbeke and Roosen (2009) identified that the identification seals of the region of origin, present especially in food products, translates great value to the final consumer, since they signal the particularities of the product and its level of quality, dispensing identifications as "premium quality" for it to value information. Thus, the use of these seals to give quality and confidence to the product is also important, because consumers end up using the tips on the labels to form their opinion about the quality of the product (Verbeke & Ward, 2006)

Regionality has become an important criterion in product evaluation and purchasing decision (Lorenz, Hartmann, & Simons, 2015) and in the same way as the effect of Denomination of Origin – D.O stamps, or even the Controlled Designation of Origin – C.D.O., the effect of the region of origin goes through three evaluative processes of the consumer: the cognitive, related to the external aspects contained in the seal itself or identification of origin.
(Hauser, Jonas, & Riemann, 2011), the affective related to the sympathy nurtured by a given region that is transferred to the product, being able to overlap with any other aspect (Obermiller & Spangenberg, 1989) and the normative that is reinforced by some studies based on ethnocentrism, which affirm that the consumer will give preference to the products of his land, in a search for the protection of his own culture or in the simple feeling of superiority and prejudice to other traditions (Fernández-Ferrín & Bande-Vilela, 2013). Thus, it is possible to infer that, in this context, the first hypotheses raised in this experiment were:

H1a – The presence of identification of the region of origin of the product exerts greater influence on the consumer's purchase intention when compared to its absence.

H1b – The presence of identification of the region of origin of the product exerts greater influence on consumer confidence when compared to its absence.

2.3 Artist-Celebrity with Regional Appeal

Celebrity can be understood as a person evident in the media and who is recognized for his various actions by a large audience (Keel & Nataraajan, 2011), being models of reference and admiration for society or social groups (McCracken, 1989). According to Rockwell and Giles (2009), celebrities can represent the desires, hopes and dreams of consumers in such a way that, for contemporary Western society, they are replacing the archetype of the hero (Mark & Pearson, 2002), besides functioning as an embodiment of brands and products, connecting and creating bonds with consumers (Thomson, 2006).

Today, the number of celebrity participations in communication activities is gigantic, because when the endorsement is made, the goal is precisely to reduce the distance between advertisers and consumers (Erdogan, Baker, & Tagg, 2001), creating a connection of identification, whether positive or negative, between product/brand, celebrity and consumer (Till & Shimp, 1998), generating an approximation and a relationship that the product alone could not achieve.

Thus, when choosing a celebrity to represent a brand or product, it should be familiar enough to the people brands want to communicate with (Choi & Rifon, 2012; Pringle & Binet, 2005). In addition, one should think about the longevity of the campaign, the acceptance of the celebrity and its evidence; the opinion of the target consumer on the use of celebrities in communication pieces; the receptivity of the target consumer in the face of the association between the brand and the celebrity (Iddiols, 2002), since similarity, familiarity, in addition to sympathy, should be considered in the design of the communication strategy with the use
of endorsed celebrities (Keel & Natarajan, 2012; Erdogan et al., 2001; McCracken, 1989; Simons, Berkowitz, & Moyer, 1970).

Products and brands that are endorsed by celebrities have a greater tendency to be chosen by consumers than those that do not have the endorsement (Boyd; Shank, 2004) in addition to the chances of positive word-of-mouth empowerment by consumers being higher when they are impacted by communication actions that feature celebrity endorsements (Bush, Martin, & Bush, 2004). From this perspective, a celebrity can positively influence, or negatively, the consumer's assessment of the product they are endorsing (Chen et al., 2012), and the celebrity profile is adapted to the type of product that is recommending a key factor for the endorsement to enhance and positively influence the consumer's purchase intention (Lee & Park, 2014).

The literature shows that celebrities add value through the process of transferring meaning (McCracken, 1989), based on the role that celebrity plays in society and the way it is seen and treated, having these aspects designed for the company, for brands and products (Amos, Holmes, & Strutton, 2008). In this perspective, it is possible to empirically induce that, in the case of local products/brands, the congruence of the origin of the endorser celebrity with the product/brand will have a greater positive influence on the confidence and purchase intention (of this product/brand) to the detriment of the endorsement by a celebrity with incongruous origin, especially if it is a product/brand that does not have national recognition (Silva et al., 2012).

Celebrities deliver meanings of subtlety, depth and power (McCracken, 1989). As observed in other studies, it is interesting to realize that in the same way that the consumer uses the brand to evaluate products of other categories, it is suggested that he anchor sin in the seals and identifications that demonstrate the region of origin of the food product as a decisive factor at the time of purchase. In this scenario, the following hypotheses were developed:

H2a - Celebrity endorsement congruent with the product region, compared to its absence, will exert greater influence on the purchase intention of locally produced products.

H2b - Celebrity endorsement congruent with the product region, compared to its absence, will have a greater influence on consumer confidence in locally produced products.
2.4 The Relationship Between the Presence of Identification of the Product Region of Origin and the Celebrity Endorsement Congruent with the Region

The presence of the identification of the region of origin is an external attribute incorporated into the product and has the power to give quality to the consumer good in question (Steenkamp, 1990; Maheswaran, 1994) through the effect of country of origin, where the positive image of the country or region in question automatically transfers its qualities and meanings to the product (Mehmet, Pirtini, & Erdem, 2010). Furthermore, studies have shown that the consumer uses the information contained in the labels to form or reinforce their opinion on the good in question, since stamps and certificates can give, in addition to quality, confidence to the product by positively stimulating the purchase intention (Verbeke & Ward, 2006). Thus, it is necessary to evaluate how the region of origin is perceived by the consumer public, since regionality has become an important evaluation criterion for the public (Lorenz, Hartmann, & Simons, 2015).

Similarly, the presence of celebrities endorsing goods and services can give quality and transmit meanings to them (McCracken, 1989), to the extent that they represent the dreams, hopes and desires of consumers (Rockwell and Giles, 2009). Thus, as Chen et al., (2012), propose, celebrities can exert a positive or negative influence on the consumer's assessment of goods and services, as well as stamps and certificates. In this perspective, as well as referencing the region of origin is a potentiating factor for the product, adapting the profile of the celebrity to the good that is recommending one is a fundamental factor for the endorsement to positively influence the consumer's purchase intention (Lee & Park, 2014).

In view of the above, it seems possible to understand that the combination of identification of the region of origin of the product and the endorsement of celebrity with regional appeal, both with similar effects on the consumer's confidence and purchase intention, form an ideal scenario to the detriment of their absences. Based on this scenario, three comparison hypotheses were developed:

H3a – The presence of identification of the product's region of origin and celebrity endorsement with regional appeal will have greater influence on the confidence and intent to purchase locally produced food products compared to the presence of celebrity identification and endorsement without regional appeal.

H3b – The presence of identification of the product's region of origin and celebrity endorsement with regional appeal will have greater influence on the confidence and intent to
purchase locally produced food products compared to the lack of celebrity identification and endorsement without regional appeal.

H3c – The presence of identification of the product's region of origin and celebrity endorsement with regional appeal will have greater influence on the confidence and intent to purchase locally produced food products compared to the lack of celebrity identification and endorsement with regional appeal.

Search Method

The research method adopted in this study is characterized as quantitative research that allows the finding of answers that can be considered conclusive and subject to generalization (Malhotra, 2019). Still within the quantitative method, the experimental method was adopted, in which the researcher manipulates one or more independent variables and observes their effect on the dependent variable(s), while controlling the possible strange variables (Remler & Van Ryzin, 2011; Kirk, 2013).

The approach used was between subjects, which allows analyzing the differences between the groups of participants of the experiment, considering the certainty that each individual participated in only one of the manipulated scenarios (Shadish, Campbell, & Cook, 2001; Malhotra, 2019) For the configuration of the groups, a 2x2 factorial design was used, considering 1 packaging model for the fictitious product Leão do Norte coffee, with variation in the presentation of the seal "Product of Pernambuco" and in the image of the endorsing celebrity (with regional appeal and without regional appeal).

3.1 Presentation of Variables

The variables involved in this experiment are independent ones, which can be manipulated and altered, regardless of other variables, and it is expected that it influences the dependent variable. Dependents are the variables that express their value through the manipulation of the researcher, being the criterion by which the results are judged (Shadish, Cook & Campbell, 2002). Below is table 1 with the variables and their uses in this study:

<table>
<thead>
<tr>
<th>Variable Type</th>
<th>Search Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td>Product Region of Origin Identification.</td>
</tr>
<tr>
<td></td>
<td>Celebrity Endorsement (moderator)</td>
</tr>
</tbody>
</table>
In addition to the variables mentioned, the control variables are constructs that can intervene in the effects caused by independents on dependents (Tabachnick & Fidell, 2006). In this study, the control variable used the preference for local or international products because it believes that, when it comes to the intention to purchase locally produced products, to investigate the consumer's preference regarding the origin of the products is relevant in this study.

Thus, to measure the dependent and control variables, as well as the profile of the respondent, some scales were used in this study. For the dependent variables, the purchase intention was measured by the adapted scale of Baker and Churchill Jr (1977), with reliability of 0.71; and trust was measured by the Chaudhuri and Holdbrook scale (2001), whose four questions represent alpha of 0.81. Regarding the control variable, the preference for local or international products was measured by the Zhang and Khare scale (2009). Thus, table 2 summarizes the above information.

<table>
<thead>
<tr>
<th>Scale of constructs</th>
<th>Items (dimensions and variables)</th>
<th>Code</th>
</tr>
</thead>
</table>
| Purchase Intent                     | 1 - I would buy the product presented in the image if I saw it in a store or supermarket.  
2 - I would search in one or more stores, to buy the product presented in the image.  
3 - I would become consumer of the product presented in the image.  
4 - Do you agree that the product previously presented with celebrity enhancement also increased your intention to consume it? | PC01 |
| Adapted from Baker and Churchill Jr. (1977) |                                                                                               | PC02 |
|                                     |                                                                                               | PC03 |
|                                     |                                                                                               | PC04 |
| Trust                               | 1 - The product shown in the image is reliable.  
2 - I believe in the product presented.  
3 - The product presented is honest.  
4 - The product presented is safe.  
5 - I would like to try the product presented. | T01  |
| Chaudhuri and Holdbrook (2001)      |                                                                                               | T02  |
|                                     |                                                                                               | T03  |
|                                     |                                                                                               | T04  |
|                                     |                                                                                               | T05  |
| Product Preference                  | 1 - I like to consume food products produced in my state.  
2 - A product with local characteristics is more attractive than products with international characteristics.  
3 - I like local products more than international products. | PP01 |
| Adapted from Zhang and Khare (2009) |                                                                                               | PP02 |
|                                     |                                                                                               | PP03 |

Table 2: Scales used in the research
Source: Elaborated by the authors (2019)
3.2 Selection of Sample

To the experiments that compose this work, the sample was non-probabilistic for convenience (Cozby, 2003; Camp, Camp, Camp; Bates, 2012), where the participants were randomly chosen, being used as the only criterion the fact that the respondent is a native of Pernambuco, since the seal used, and the celebrity endorser refers exclusively to this State. A random designation of the subjects and the treatments given to the groups was made by means of an egalitarian distribution to disperse the effects of the foreign variables for all conditions. Thus, the chance of unknown effects accumulating in specific experimental groups can be identified.

The sample size for each experiment was delimited using the G*Power software. This software provides alternatives for sample calculation, so the following were defined: F-test; ANOVA two way (interactions); effect size $f = 0.25$; $a = 0.05$; power $= 0.80$; $df = 1$; and number of groups $= 4$ (2 x 2 design), the sample indicated by G*Power was 128 participants. Thus, a minimum number of 40 participants was established in each treatment group (considering that some questionnaires are excluded), totaling a sample of 160 for each of the studies (1 and 2).

3.3 Data Collection

For all studies, participants received access links to the questionnaires through social networks, so that each group had access to a single link. Thus, the four questionnaires were applied virtually, structured and answered through Google Forms. It was structured in 9 sections and had 22 questions distributed between manipulation checking, attention check, dependent variable, control variables and demographic survey.

A pre-test of the data collection instrument and stimuli was performed in each treatment with a sample of 31 respondents. These respondents were not part of the final sample. The pre-test was done on November 6, 2019. Data collection for the final sample was from November 27, 2019, to December 16, 2019.
3.4 Data Processing

Univariate and multivariate statistics were used to perform data analysis using IBM SPSS statistics statistical software. The variables were first analyzed by descriptive statistics [frequencies, means (M) and standard deviations (SD)] (Cozby, 2003).

Cronbach's alpha coefficient was used to verify the reliability of the scale items, and the level was adopted from 0.7. The student's t-test was used to analyze the differences between the means of the manipulations in the manipulation checks for the manipulation check. Consequently, in the analysis of the hypotheses, the ANOVA two way was used, a test that allows examining the moderation of the variables through the interactions of the treatment variables. Ancova was used to analyze the inclusion of control variables (Costa, 2018).

Practical Research

This study aims to analyze the effects of product origin identification and the endorsement of celebrities congruent with the product region on the trust and intention to purchase locally produced products. Thus, in the next sections will be demonstrated the design and procedure performed in this study, in addition to the results obtained and the discussion of them.

4.1 Method

**Design and procedures:** In this experiment, a study was carried out with factorial experimental design (2x2), between subject (Identification of the Region of Origin of the Product: With seal vs. No seal) x 2 (Celebrity endorsement: With regional appeal vs. without regional appeal). In the present study, we sought a celebrity that was recognized by the respondents as having affinity with the region, in this case, with Pernambuco. The verification of the regional appeal of the celebrity was made through a single structured question in Google Forms in which two celebrities were introduced to 31 respondents who indicated, on a likert scale, the degree of congruence of celebrities with the State of Pernambuco, where 1 represents no identification and 7 too much identification. The celebrities chosen were the actresses Fabiana Karla and Daniele Winitz and, in the data collection, it was found that the respondents indicated that the actress Fabiana Karla has higher (96.8% - sum of the answers for much identification, identification, medium identification) identification with the state of
Pernambuco (regional appeal - 96.8%) and that the actress Daniele Winitz has lower (90.3% sum of the answers for no identification, little identification, medium identification) identification with the State (regional appeal).

The manipulation of the product source identification was made by inserting a seal developed by the authors and placed in a coffee package, verified through a question check "in the image above, it is possible to identify the region of origin of the product" with answer 1 'I totally disagree' and 7 'I totally agree. Similarly, the celebrity endorsement variable was verified with the insertion, in the same coffee packaging, of the alternate images of Fabiana Karla and Daniele Winitz, where the congruence with the region was verified through the question check "in the image above, it is possible to say that the celebrity belongs to the region of origin of the product", with answer 1 'I totally disagree' and 7 'I totally agree.

A control variable was also used to measure the attitude of respondents regarding their preference for local or international products, through some questions that expressed how predisposed and inclined they were to consume products according to the origin of production. The answers were also used by the seven-point Likert scale: with answer 1 'I totally disagree' and 7 'I totally agree.

This research also used an attention check question, attention check, to assess whether the participants were, in fact, paying attention when reading the instructions and answering the questions. This question gave directions to be followed by the participants, with the following formatting: "We want to know which food you consider tastiest. In fact, we're testing your attention to see if you're following the instructions correctly. To prove that you are following the instructions, choose the 'Other' option in the question below and type the word 'Lasagna'. The options that were part of the questionnaire were: 'Macarronada', 'Feijoada', 'Saladas', 'Outra'. Which one?" Due to this attention check of the 110 (one hundred and ten) questionnaires 03 (three) were invalidated and, consequently, removed from the final sample.

At the end, some questions about the demographic profile of the respondents, such as gender, marital status, education and income, were measured. Finally, the following question was presented: "do you know what the objective of this research is?", to identify whether individuals could guess the objective of the research.
4.2 Results

Participants. A total of 110 respondents participated in this study, randomly chosen and as already mentioned, discarded 3 questionnaires according to attention check response. In this regard, the demographic profile of the 107 respondents had the following configuration: 46.7% are male and 53.3% are female; the mean age of the participants is 23 years (D.P. = 8.47); the average monthly income is R$ 2145.52 (D.P. = 4950.115); 57% of the respondents have completed high school education; and 80.4% of the participants were single.

Manipulation check. The handling check for the place of origin was made by means of a central check question: "In the image above it is possible to identify the place of origin of the product in question." This question had the following means: With identification seal M = 6.32, D.P = 1.50; without identification seal M = 3.37, D.P = 2.57; t (105) = 7.158, p<0.01. The results demonstrate the consistency of the manipulation regarding the identification of the place of origin of the product, in convergence with the results obtained in the pre-test performed with 107 respondents, where they stated that it was possible to identify the place of origin of the product based on the seal exposed on the coffee packaging.

Regarding the verification of celebrity manipulation with regional appeal, a central check question was asked: "In the image above it is possible to identify the presence of a regional celebrity" resulting in the following means: speed with regional appeal M = 6.59, D.P = 0.83; celebrity without regional appeal M = 3.85, D.P = 2.63; t (105)= 7.641, p<0.01. The results show a difference between the statistically significant media, corroborating what was pointed out in the pre-test.

Hypothesis test. To test the hypotheses, the ANOVA two-way test was used. Cronbach's Alpha was used to verify the reliability of the scale referring to the dependent variable, Purchase Intention (α = 0. 8.35), which contains 4 items, the second dependent variable, Confidence (α = 0, 9.27), with 5 items, and the control variable, Product Preference (α = 0.802), with 3 items. Thus, the means found for each treatment group for the two independent variables, identification of the place of origin of the product and celebrity with regional appeal, in relation to the purchase intention, can be verified in Table 3.

<table>
<thead>
<tr>
<th>Seals and Identifications of Origin of Product</th>
<th>Celebrity Artist</th>
<th>Average</th>
<th>Standard deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>With seal</td>
<td>Regional celebrity</td>
<td>5.7600</td>
<td>1.277981</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Non-regional celebrity</td>
<td>3.7823</td>
<td>1.63295</td>
<td>31</td>
</tr>
</tbody>
</table>

Revista Gestão e Secretariado (GeSec), São Paulo, SP, v. 14, n. 9, 2023, p. 15356-15378.
In this sense, the results show that there was no direct effect of the place of origin on the RV purchase intention ($F(1, 103) = 1.844, p>0.177, \eta^2 = 0.108$), but the VI celebrity exerted influence on the RV ($F(1, 103) = 47.939, p<0.001, \eta^2 = 0.318$). No interaction effect between the VIs ($F(1, 103) = 0.266, p>0.607, \eta^2 = 0.003$).

According to the results found, it is possible to support H2a which says: "Celebrity endorsement congruent with the region of the endorsed product, compared to its absence, will exert greater influence on the intention to purchase locally produced products" while filling studies already conducted on celebrity endorsements on products and services, indicating that, when it comes to local products, the congruence of celebrity with the region should be considered as it exerts influence on the consumer's purchase intention. However, it is not possible to sustain H1a: "The presence of identification of the region of origin of the product exerts greater influence on the consumer's purchase intention when compared to its absence". This result may be linked to the fact that the chosen product (coffee) and the place of origin evaluated (Pernambuco) do not have a direct association, even the State has expressive coffees in the market. This result is contrary to those found by Lorenz, Hartmann and Simons (2015) in their studies on the effects of designation of origin on food products.

Next, Table 4 presents the means found for each treatment group for the two independent variables, identification of the place of origin of the product and celebrity with regional appeal, in relation to trust.

### Table 3: Descriptive statistics
Source: Research data

<table>
<thead>
<tr>
<th></th>
<th>Without seal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average 1</td>
<td>Average 2</td>
</tr>
<tr>
<td></td>
<td>Standard deviation 1</td>
<td>Standard deviation 2</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>With seal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional celebrity</td>
<td>5.2619</td>
<td>4.6652</td>
</tr>
<tr>
<td>Non-regional celebrity</td>
<td>3.5583</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>4.2958</td>
<td>1.78585</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Without seal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional celebrity</td>
<td>5.5326</td>
<td>4.2958</td>
</tr>
<tr>
<td>Non-regional celebrity</td>
<td>3.6721</td>
<td>107</td>
</tr>
<tr>
<td>Total</td>
<td>4.4720</td>
<td>1.63804</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variável dependente: Confiança</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seals and Identifications of Origin of Product</td>
</tr>
<tr>
<td>With seal</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Without seal</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Revista Gestão e Secretariado (GeSec), São Paulo, SP, v. 14, n. 9, 2023, p. 15356-15378.
According to the results, it is possible to identify that there was a direct effect of the two IVs on the DV Trust ($F(1, 97) = 7.100, p > 0.009, \eta^2 = 0.068$) for place of origin, and ($F(1, 97) = 6.409, p > 0.013, \eta^2 = 0.062$) for Celebrity with regional appeal. In addition, there was no interaction effect between the IV ($F(1, 97) = 0.134, p > 0.715, \eta^2 = 0.001$).

Following the results found, hypothesis H1b "The presence of identification of the region of origin of the product exerts greater influence on consumer confidence when compared to its absence" can be sustained and, on the other hand, the Hypothesis H2b "The endorsement of celebrity congruent with the region of the endorsed product, compared to its absence, will exert greater influence on consumer confidence in locally produced products" was refuted. This result may be related to the fact that the celebrity endorser, however congruent with the region, is not congruent with the product presented (coffee – food), which may not have positively influenced consumer confidence to the point of presenting statistical significance in this study.

Several experimental studies based on celebrity endorsement confirm its influence on the consumer's purchase intention, which is a counterintuitive result to the point that it shows the importance of considering factors such as congruence with the region and the endorsed product as decisive complements to celebrity endorsement.

Additional testing. To test the control variables, ANCOVA was used. Thus, it was verified that when inserting the control variable Preference for the Product, it exerted main effect on the DV Purchase Intention, leading the Place of Origin to have direct effect as well. However, the inclusion of the variable did not alter the previous result in relation to the interaction of the IV, in which it had no interaction effect.

Regarding the second DV, Trust, the inclusion of the control variable in the model shows that it has a direct effect on the DV ($F(1.96) = 15.928, p < 0.001, \eta^2 = 0.142$) and altered the previous result of the IV Celebrity ($F(1, 96) = 2.520, p > 0.116, \eta^2 = 0.026$), no longer having direct effect, and the IV Place of Origin ($F(1, 96) = 10.536, p = 0.002, \eta^2 = 0.099$), gaining direct effect. The other two results remained the same.

**Table 4: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Source: Research data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Regional celebrity</td>
</tr>
<tr>
<td>Non-regional celebrity</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
4.3 Discussion of Results

The implementation of product origin identification seals, such as the Designation of Origin and the Controlled Designation of Origin, reinforces aspects of product quality and value, as proposed by Verbeke and Roosen (2009), and can positively influence the purchase intention, mainly, of food products. Regarding celebrity endorsement, the literature itself demonstrates that it adds value through the process of meaning transfer (McCracken, 1989), based on the role it plays in society and the way it is seen and treated (Amos, Holmes & Strutton, 2008). These aspects corroborate the direct influences found in this study between the constructs "Identification of the Product Region of Origin" and "Celebrity Artist with Regional Appeal" and the Rvs, however, did not interact with each other, indicating that the interaction hypotheses, H3a, H3b and H3c, were all refuted.

The absence of interaction between the constructs suggests that these results may be linked to factors such as: the chosen product (coffee) and its relationship with the place of origin (Pernambuco) may not be known to the respondent public, which did not generate direct assimilation significantly, as desired; the celebrities chosen, although recognized in the pre-test as celebrities and as congruent and incongruous with the region (Pernambuco), have no connection with the food market, which, once again, may have interfered in the consumer's perception of the endorsement made, not generating statistical significance, as already mentioned. In addition to these factors, the preference for the product had been evaluated in the local-international aspect, not considering the predilection for the product itself (coffee), even if it exerts direct and positive influence in the study.

From the results found in this study it is possible to perceive the importance of aligning market elements holistically, especially when it is intended to use the combination seals and certificates of identification of region of origin of the product and the endorsement of celebrities with regional appeal. Even the experimental studies massively pointing to the positive and effective result of celebrity endorsement (Amos, Holmes & Strutton, 2008), this research is relevant to the extent that it envisions an opposite direction in this way, showing that celebrity recognition and identification with the region are not enough to positively and significantly influence the intention to purchase food products, especially if they are commodities. Thus, the empirical look suggests that, when it comes to analyzing the intention to purchase other products, such as artisanal food products, which naturally carry a greater relationship with the region where they are produced, these results may be different, more prone to established relationships, generating greater statistical significance.
Conclusions

This research sought to extend and contribute to the literature on the effects of identifying the place of origin of the product and the endorsement of celebrities with regional appeal on the intention to purchase locally produced products. The initial premise of this research was that the presence of the seal of identification of the place of origin and the endorsement of celebrity congruent with the region would have more positive effects on the confidence and intention to purchase locally produced products when compared to the absence of the seal and the presence of a celebrity incongruous with the region of origin.

In this context, counterintuitive results were found that showed that both the seal and celebrity endorsement depend on other factors to achieve their goals. The results found indicate that the main proposition of this research was not confirmed, since it was possible to verify that the endorsement of the celebrity congruent with the region (with regional appeal) was not able to significantly increase the intention to purchase locally produced products, as well as was not able to increase confidence in these products. Again, this fact may be related to the choice of the celebrity in question, the actress Fabiana Karla, who is not connected to the food business and, therefore, may not have offered enough support to the purpose of the research.

The results also showed that the identification seal showed significant influence on the purchase intention and independent confidence of the celebrity's congruence with the region, a result maintained when the control variable Product Preference was inserted, corroborating the initial proposition that, when it comes to food products, the identification of the place of origin exerts positive reinforcement and increases the confidence and purchase intention for these products (Verbeke & Roosen, 2009).

In this sense, the main contribution of this research is to demonstrate that consumers have preference over food products that indicate, in their packaging, the place of production, reinforcing their intention to purchase and their confidence about the product generated by the identification between consumer and region. It can also be considered as a contribution of this study the use of the factor "regional appeal" linked to the endorsement of celebrity; an indicator not identified in experiments of a similar nature to this. Still about "celebrity", this study concludes that it is not enough for the celebrity to be congruent with the region, but its connection with the product tends to increase the power of the Generated endorsement, as shown in the first test performed. Finally, this study, in addition to reinforcing the findings of Amos, Holmes and Strutton (2008), Verbeke and Roosen, (2009), full-bodied this field of
study when considering commodity products, different from articles on identification of the place of origin that briefly deal with official indicators in non-commodity products, such as wines and cheeses of artisanal manufacture.

It is believed that this research has practical and managerial implications in that it provides evidence that is useful to local food producers, indicating how competitive and representative their product can become when identifying the place of origin in its packaging. Regarding the limitations, it is believed that the fact that the experiment is characterized as 2x2 cannot consider, beyond the regional appeal, the relationship of celebrity with the food area, which would characterize it as a 2x2x2 experiment. It can also be considered as a limitation the choice of a product (coffee) that, although popular, does not represent such a clear connection with the chosen region (Pernambuco). Moreover, the fact that most respondents are single may indicate a predilection for eating outside the home, which implies the low intention of buying commodities products.

As a recommendation for future research, it is indicated that the replication of this research proposal considering the aspects that this study, as already mentioned, could not cover: the congruence of the celebrity with the region and the product, the preference for the product itself, the origin of the respondents, the image of the product region before the public and other variables that may interfere, whether positive or negative in the results.

References


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