Country-Of-Origin Effects on The Naturalness Perception by The Consumer

Erasmus University Rotterdam

Erasmus School of Economics

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Erasmus School of Economics



Beatriz Da Costa Ventura

606819

Supervisor: Dr. Ana Scekic

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Acknowledgements

In September of 2021 I moved to Rotterdam and started my master's degree in Marketing, at Erasmus School of Economics. It was an exciting challenge adjusting to a different culture and to a different education. The master thesis, however, proved to be the most challenging of all. In December, I began looking for thesis topics, and after some searching, I discovered something both theoretically and personally appealing. As a result, this was an excellent opportunity for me to broaden my knowledge, push myself, and learn more about naturalness perception and country-of-origin (COO) effects.

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Abstract

This thesis studies the country-of-origin effects on the naturalness perception by the consumer. Prior research has been focusing on finding new naturalness cues that influence the consumers' naturalness perception, as well as finding out how country-of-origin affects the consumer behaviour. As a result, this research contributes to these two fields of study by revealing how products from the home-country of the consumer contribute to a higher naturalness perception.

The results of the conducted quantitative study reveal that people from The Netherlands perceive Dutch products as more natural compared to products from Belgium and France. Additionally, the study reveals that the price of the product influences the relationship between country-of-origin and naturalness perception, such that when the price of the product is higher than the average price, the main effect is attenuated. Lastly, the quantitative study discloses that the feeling of trust of consumers, in the country-of-origin of the product, explains the relationship between the country-oforigin and the naturalness perception of the consumer, such that when there are higher levels of trust in the country-of-origin, there will be a higher naturalness perception of the product.

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1. Introduction

1.1 Background

The 21st century has seen the growth of a wide range of sustainable concerns. Humans have been motivated to act and contribute to a less harmed environment as a result of these concerns. Specifically, consumers have been changing their consumption behaviors and an interest in natural products emerged.

Natural preference was defined in several studies by Paul Rozin. The researcher raises two different perspectives, through instrumental and ideational bases. On the instrumental side, natural preference is intrinsically related to sustainability. Natural is often seen as healthier, kinder to the environment and more attractive (Rozin, 2005). Moreover, in terms of ideational arguments, naturalness is "a preference for the normative order" (Rozin, 2005). The ideational perspective is often linked with moral and aesthetic associations (Rozin, 2005). Here, preference typically has moral connotations and consumers prefer natural just because it is "right" or intrinsically better (Rozin, 2005).

The "Natural" attribute typically denotes a positive characteristic in all contexts (Rozin, 2005). Nowadays, consumers are seeking natural products in several areas, such as in home products, personal care products, medicines, and food products. In the food industry, the preference for naturalness has been more and more adopted by consumers, in a way that products claiming to be more natural are more attractive to consumers (Rozin, 2005). However, there are several interesting questions left to answer. Which factors can influence natural preference and what can companies do to pursue consumers' desire?

With the purpose of finding and studying new factors that impact consumer naturalness perception, the influence of the country-of-origin (COO) of products is going to be approached in this research. The continuous global evolution allows customers to choose from an extensive variety of products, giving them the possibility to acquire not only national products, but also foreign products. In this competitive market, country-

of-origin effect plays a big role in the consumer intention and may have a positive or a negative impact (Rezvani, et al., 2012).

Country-of-origin effects in consumer behavior have been studied since the 1960's. Country-of-origin is an extrinsic product cue that influences customer product evaluation and customer purchase intention. Hereupon, one of the most considered and studied topics by marketing researchers are the COO effects (Lin & Chen, 2006).

1.2 The problem and research questions

Nowadays, companies need to adjust their strategy as the world becomes more competitive and more globalized, having in mind that the preservation of the environment is one of the most active alarms today. To deal with these concerns, companies should perform their best sustainable work and recognize the rising preference for naturalness.

Among the extensive area of possible naturalness cues unsearched, this thesis will focus on the country-of-origin effects on naturalness perception by the consumer. More specifically, the study of country-of-origin effects on the naturalness perception by the consumer will concentrate only on fresh products. Fresh products are not processed products, not altered in any manner by humans. These products include both vegetables and fruits. The reasoning behind fresh products' choice for this thesis is that there is a previous relationship between fresh products and natural products, given that both did not have human intervention. Given that, it was decided that it would be interesting to study whether certain cues influence the naturalness perception of these products that are already being defined as natural by many people.

The main purpose of the study of the effects of the COO label in this research will be the differences in the consumers' naturalness perception between domestic-made products and foreign-made products. The goal is to understand the influence that domestic-made products (products manufactured/produced in the home-country of the consumer) have on the naturalness perception by the consumer compared to foreign-made products (products manufactured/produced outside the home-country of the consumer).

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The expected effect is the positive influence on the naturalness perception by the consumer when the product is domestic-made vs when it is foreign-made. As an example, if a Dutch consumer is in an Albert Heijn supermarket and is choosing a fresh product, and if there is one produced in the Netherlands and another one from another country, the expectation is that the Dutch consumer will perceive the domestic-made product as more natural. Naturally, other factors will impact this relationship, such as price and level of trustiness in the country.

Consequently, this thesis proposes to clarify this relationship, which will give the opportunity for companies to comprehend the impacts of the COO on the naturalness perception by the consumer, contributing to a deeper understanding of the consumer behavior. As a result, marketeers and businesses in the food industry will benefit and enrich their knowledge with this study, since it will provide new information and gather important insights on two important conditions and discover their relation and influence on each other. For that matter, the following questions need to be answered:

Research Question:

Does the country-of-origin of "fresh products" influence the naturalness perception by the consumer?

Additionally, the following 2 sub-questions will be addressed further ahead.

Sub-Research Question 1:

Does the price of fresh products moderate the effect of country-of-origin on the perception of naturalness by the consumers?

Sub-Research Question 2:

Does the feeling of trust mediate the effect of country-of-origin on the perception of naturalness by the consumers?

1.3 Theoretical and Managerial contributions

The growing preference for natural products by the consumers naturally garnered the attention of managers and researchers (Binninger, 2017). Similarly, COO effects are very attractive for marketing researchers, being one of their most studied topics (Lin & Chen, 2006).

The preference for natural products by the consumers is an established point in the literature (Scott, Rozin, & Small, 2020). Beyond that, the country-of-origin has demonstrated an influence on the product evaluation in many research projects (Krystallis & Chryssochoidis, 2009). However, the product naturalness field of study lacks some insight on more and different naturalness cues influencing the consumer perception. Having this in mind, researchers can learn about an innovative naturalness cue not yet studied. Likewise, there is no research relating the COO effects with the product naturalness perception by the consumer. In this way, researchers interested in the COO effects will be enriched with this thesis as well.

Moreover, managers and marketeers will benefit from this research, by getting an interconnected perspective combining COO effects and product naturalness preference. The research will contribute with new insights and will help companies to understand how COO labels impact naturalness perception by the consumers. Therefore, companies will benefit from this study by understanding how consumers are influenced by the country-of-origin of products and how the level of trust in such country is also relevant for consumers. Subsequently, companies could build and explore the idea of naturalness and eventually positively influence purchase intention.

Additionally, it is important for companies that sell fresh products to consider what cues influence naturalness perception, given the rising environmental and health concerns and, subsequently, the growing consumers' preference for natural and non-processed products.

2. Theoretical Background

2.1 Naturalness Perception

Prior research has shed light on some naturalness cues that influence the consumer perception of the product. For example, Anne-Sophie Binninger (2017) studied the impact of packaging on the consumer naturalness perception (Binninger, 2017). The packaging "must transmit the perceived naturalness of a product" and communicate the brand image (Binninger, 2017). Emotional elements, such as colors, shapes and slogans, and functional elements, such as ecological labels, both present in the packaging, will contribute for a higher perception of naturalness (Binninger, 2017).

On the other hand, Lunardo and Saintives (2013) describe "what leads consumers to perceive a product as natural in the point of purchase" (Lunardo & Saintives, 2013). Two experiments revealed that the naturalness perception by the consumer is influenced by the type of point of purchase, such as supermarkets and traditional markets. When there is a consistency between the salience of naturalness claims and an appropriate point of purchase, such as a traditional market, products are seen as more natural. In contrast of what Binninger (2017) demonstrates, about the positive influence of naturalness claims on the naturalness perception by the consumer, such as eco-friendly labels, quality labels or ecological claims, Lunardo and Saintives (2013) state that naturalness claims may be inefficient under certain circumstances (Binninger, 2017; Lunardo & Saintives, 2013). For the scholars, naturalness claims only influence naturalness perception by the consumer of purchase of the product simultaneously transmits the idea of naturalness (Lunardo & Saintives, 2013).

Tyler Murley and Edgar Chambers' research gives an interesting view of the effect of colorants, flavorants and product identity on the perception of naturalness by the consumers (Murley & Chambers, 2019). A questionnaire that gathered one thousand respondents from the UK, the US, and Australia asked participants to rate how natural they perceived several products. These products had distinct combinations of natural and artificial flavors and colors. The results revealed that artificial colors and flavors have a negative impact on the naturalness perception of a product. Additionally, artificial

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colors appeared to have a stronger impact than artificial flavors (Murley & Chambers, 2019).

Furthermore, the influence of firm size on naturalness perception by the consumer was also studied by Ana Scekic and Aradhna Krishna (Scekic & Krishna, 2020). In four different studies it was shown that the products from firms with a smaller size are seen as more natural than products from big size firms (Scekic & Krishna, 2020). In addition, the increase in the naturalness perception is converted into an increase in purchase intention (Scekic & Krishna, 2020).

According to Rozin (2004), the "natural" attribute has been more and more desired as the years go by, especially in the food field (Rozin, et al., 2004). For this matter, fresh products have been chosen as the "object" of the research. Fresh products are products that did not have human intervention in any way. As Rozin states (2015), naturalness emerges when there is no human intervention, more specifically, when products are not preserved and spoiled in any manner (Rozin, 2005). Rozin's description of naturalness leads us to fresh products as well, which consist of non-processed products. Indeed, it is interesting to investigate if the naturalness perception of these fresh products is influenced by certain cues, such as the country-of-origin. Following the purpose of focusing the research on fresh products, a lettuce was chosen to be the object of this thesis, since it is a very common and classic vegetable around the world.

2.2 Country-of-origin Effects

Usually, the country-of-origin is designated as the country in which the product was produced, typically identified by the "made in ___" feature on the product (Bilkey & Nes, 1982). There is some controversy when designating the right country-of-origin because, today, it is very rare that one product is manufactured, assembled, and designed in the same country (Lee & Lee, 2009). Nonetheless, for this thesis, the country-of-origin will be considered as the country where the product was produced/manufactured.

Country-of-origin effects have been studied for decades. In 1965, Schooler demonstrated that products with similar characteristics, except for the COO label, were evaluated differently (Schooler, 1965). In 2007, Chattalas, Kramer and Takada studied

the effects of national stereotypes on consumer product evaluations. The researchers provided useful information for firms, particularly operating in different countries, referring that these should enforce their national image as it relates to the different consumer characteristics and product attributes (Chattalas, Kramer, & Takada, 2007).

Some authors have concluded that product perception is highly influenced by the level of suitability of a specific region of origin to produce such product (Ittersum, Candel, & Meulenberg, 2003). The researchers affirm that product preference is influenced by the attitude towards the country-of-origin, essentially by affective feelings (Ittersum, Candel, & Meulenberg, 2003). In the same way, Wang, Li, Barnes, and Ahn demonstrate a relationship between the country image (CI) and the consumer purchase intention (Wang, Li, Barnes, & Ahn, 2012). The country image includes cognitive and affective believes. The cognitive CI is defined by economic and technological aspects, while affective CI is represented by social and political factors (Wang, Li, Barnes, & Ahn, 2012). More specifically, the scholars suggest that the cognitive and affective CI impact the consumers' intention to purchase in diverse ways. However, affective CI may predict more accurately the purchase intention of consumers (Wang, Li, Barnes, & Ahn, 2012).

Prior research has put emphasis on the influence of COO effects considering country image product knowledge and product involvement. Lin and Chen (2006) found that a positive country image leads to a positive purchase intention (Lin & Chen, 2006). Furthermore, they state that the consumer product knowledge affects the process of decision-making, which, subsequently, influences purchase intention (Lin & Chen, 2006). Additionally, the scholars confirm that product involvement, i.e. recognition and personal interest for a product, also influences positively consumer purchase decision. Nevertheless, different levels of product involvement do not interfere on the positive effect of country image and product knowledge on purchase intention (Lin & Chen, 2006).

Hence, it is already proven that this extrinsic cue, which informs consumers about the products' country-of-origin, influences consumers' behaviour. Nonetheless, this thesis wants to discover if there is an influence of the country-of-origin of the product on the naturalness perception of the consumer.

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2.3 Hypotheses and Conceptual model

Prior research has proved that consumers have been more and more attracted to natural products, and researchers try to find what naturalness cues can possibly influence consumers' perception (Rozin, 2005). There are innumerable naturalness cues not yet tested that could be approached and studied, contributing for this area. In this way, country-of-origin emerged as a possible naturalness cue that could influence the customer perception. Essentially, it is theorised that a consumer of a fresh product will perceive a domestic-made product as more natural than a foreign-made product.

Additionally, prior research on ethnocentrism effects confirms that consumers with high levels of ethnocentrism prefer national over foreign made products (Chattalas, Kramer, & Takada, 2007). The literature on COO effects associated with ethnocentrism effects suggests that consumers perceive foreign products as "socially undesirable and unpatriotic" (Chattalas, Kramer, & Takada, 2007).

Moreover, a 2017 Nielsen survey conducted around 63 countries, involving 31,500 participants, revealed that consumers prefer brands that manufacture their products locally and close to the source of purchase, especially in the fresh food category (Nielsen, 2017). Nielsen research discloses the consumers' tendency to think that shorter distances between the manufacture location and the purchase point imply a higher product quality. The fact that it is not necessary to add so many chemicals to preserve the fresh products, because they are closer to the source of purchase, is also seen as healthier. Subsequently, for this research, it is suggested that from this higher perception of quality, a higher perception of naturalness will also occur. Therefore, consumers when buying products in their country, will perceive home-made products, with their manufacture locations closer to the source of purchase, as more natural than foreign-made products. Having this in mind, a higher perception of naturalness by the consumers when fresh products are from the country-of-origin of the consumer is hypothesized in this research.

H1: The perception of naturalness by the consumers is influenced by the countryof-origin of fresh products. Specifically, when fresh products are domestic-made, consumers will perceive them as more natural. In this research it is proposed that price plays a moderating role in the relationship between country-of-origin effects and the perception of naturalness by the consumer. According to an article published in 2016, price is an important cue in consumers' decision making and there is a relationship between price and healthiness perception (Haws, Reczek, & Sample, 2016). Although this relationship may not be accurate at all times, consumers give a healthier attribution to more expensive products (Haws, Reczek, & Sample, 2016). Given this, naturalness can be equated to healthiness in this case, so the influence of price will be studied in the perception of naturalness by the consumer. The expected result is an attenuated main effect of the country-of-origin on the naturalness perception of the consumer when the price of the foreign product is higher than the average price, such that when the price of the products is higher than the average price, the difference between the naturalness perception of the products from The Netherlands and the naturalness perception of the products from Belgium and France will be less expressive. This change in effect is expected because the higher price could increase the perception of naturalness for the product from the foreign country.

H2: The price of the fresh product moderates the effect of the country-of-origin on the perception of naturalness by the consumers, such that the main effect is attenuated when the price of the foreign product is high.

H2.1: Specifically, when the lettuce is from The Netherlands and has an average price, the perception of naturalness of this lettuce will be higher compared to the lettuce from Belgium with an average price as well. However, when the lettuces have an inflated price, the main effect will be attenuated.

H2.2: Specifically, when the lettuce is from The Netherlands and has an average price, the perception of naturalness of this lettuce will be higher compared to the lettuce from France with an average price as well. However, when the lettuces have an inflated price, the main effect will be attenuated.

A study made in 2014 reveals the mediating role of trust when it comes to COO effects (Jiménez & Martín, 2014). Scholars defend that COO labels may not always have a direct impact on consumers' perceptions and intentions, but that COO impacts indirectly more often (Diamantopoulos, Schlegelmilch, & Palihawadana, 2011). So, the moment that consumers get to know the country-of-origin of a specific product, emotional reactions can be activated and thus, feeling of trust for that country may emerge (Diamantopoulos, Schlegelmilch, & Palihawadana, 2011; Jiménez & Martín, 2014).

Prior research reveals that consumers prefer products from their home-country. This preference is explained by the consumers' affinity for domestic brands. (Lee, Knight, & Kim, 2008). Additionally, domestic products are perceived to have a higher quality (Lee, Knight, & Kim, 2008). Specifically, when the country-of-origin of a product is the shoppers' home-country, a feeling of trust is triggered (Jiménez & Martín, 2014). When there is a feeling of trust in the country-of-origin of the product it is likely that the consumer conceives the product as more natural.

H3: Feeling of trust mediates the effect of country-of-origin on the perception of naturalness by the consumer, such that, when the country-of-origin is the home-country of the consumer a feeling of trust in the COO is activated. Subsequently, the feeling of trust in the COO leads to an increased perception of naturalness on the product by the consumer.



Figure 1- Conceptual Model of the Research

3. Methodology

The methodology procedure for this research will be explained in this chapter. The methodological approach will be presented first, followed by an explanation of the chosen methods used to test the three hypotheses. At the end of the chapter, the requirements for participating in the survey, the manipulation check, and the control variables will be also explained.

3.1 Methodological approach

This thesis aims to understand the influence of country-of-origin effects on the naturalness perception by the consumer. More specifically, if fresh products made in the home-country of the consumer are perceived as more natural than a foreign-made fresh product. A couple of sub-questions, that also need an elucidation, result from the main question. The first sub-question is "Does the price of fresh products moderate the effect of country-of-origin on the perception of naturalness by the consumers?" and the second sub-question is "Does the feeling of trust mediate the effect of country-of-origin on the perception of naturalness by the consumers?" and the sub-question of naturalness by the consumers?". An experiment will be conducted using an online Qualtrics survey, as the thesis methodological instrument, to test the main research question and the sub-questions, which are based on three hypotheses.

As a result, the three hypotheses will be investigated using a six-condition between subject design. In the Qualtrics online survey, a photo of a lettuce was showed (see *Figure 2*) and each participant received one of six distinct conditions. The conditions varied from price and country-of-origin, with two different prices and three different countries. Therefore, a 2 (average price vs inflated price) * 3 (The Netherlands vs Belgium vs France) between subject design assisted the study. Each condition briefly described the context of the experiment and asked to the participants to imagine that they were in a supermarket in The Netherlands looking for a lettuce to buy. For the participants' engagement in the scenario, the following description was also included: "(...) you are in front of a shelf, and you have several lettuces in front of you. This specific lettuce, the one that you see below in the picture, was made in *X* and its price is *Y* of a lettuce in the market." Being "*X*" the country-of-origin, "The Netherlands", "Belgium" or

"France", and "Y" the price level, "comparable to the average price of a lettuce in the market" or "50 cents higher than the average price of a lettuce in the market".



Figure 2- Photo of the lettuce showed in the survey

Accordingly, the survey gathered 210 respondents, and each condition collected 35 answers. To acquire additional reliable results, the between subject design methodology was adopted. Otherwise, if all the conditions were showed to the participants, there could be an acknowledgement of the study's purposes, which could jeopardize the thesis findings.

Regarding the main research question, the first hypothesis (H1: The perception of naturalness by the consumers is influenced by the country-of-origin of fresh products. Specifically, when fresh products are domestic-made consumers will perceive it as more natural) is tested through this experiment, conducted by an online survey. The survey targeted people with Dutch nationality, with the purpose of discovering if products made in the Netherlands versus products made in two foreign countries would be perceived as more natural by Dutch consumers. In this way, there were three different scenarios regarding the country-of-origin of the fresh product. Besides The Netherlands, only European countries were considered when choosing the two other countries to be included in the experiment. Or else, if countries out of Europe were involved in this research, the perception of naturalness could possibly change due to external reasons, such as quality of life, agriculture characteristics and wealth conditions. Consequently,

with the aim of reducing non-related impacts, even inside Europe, two well-developed European countries, with similar characteristics to The Netherlands, were chosen to be part of the research. Belgium and France constitute the two other conditions to study the COO effects.

To test the second hypothesis (H2: The price of the fresh product moderates the effect of the country-of-origin on the perception of naturalness by the consumers, such that the main effect will change direction when the price of domestic made fresh products is lower than a foreign made fresh product) the same experiment used to test the main research question served this hypothesis. The two conditions regarding the price of the fresh product were the average price of a lettuce and an inflated price, both without specifying a precise price so that participants would not focus solely on the price, ignoring the main effect of the country-of-origin. However, the inflated price condition needed to be clearer. For this reason, the inflated price is described as "50 cents higher than the average price of a lettuce in the market". According to Selina Wamucii statistics, the average price of a lettuce in the Netherlands in 2019 was \$1,87 per head, which is \in 1,69 in the current exchange rate (Wamucii, 2022). For that matter, 50 cents are the anchor for the inflated price, because it was applied an inflation rate of 30%. Accordingly, 30% of \in 1,69 is approximately 50 cents.

After displaying one of the six conditions, seven-point Likert scale questions were asked to the participants regarding their perception of naturalness of the product, given different prices and countries-of-origin. To measure the perception of naturalness by the consumers, it was asked to the participants to select their level of agreement with specific statements, such as "This lettuce is natural"; "This lettuce is organic"; "This lettuce does not contain additives"; "This lettuce is free of chemical preservatives "; "This lettuce is processed as little as possible" and "This lettuce is healthy". The structure of these questions was based on previous research (Sanchez-Siles, et al., 2019; Camus, 2004; Roman, Sanchez-Siles, & Siegrist, 2017). Furthermore, the statements were presented in this order to convey a relevant naturalness representations direction. Beginning with a statement with the "natural" word itself in the statement, followed by a substitute of the word in the next statement, containing the "organic" word. The third statement characterized the "no additives" connection with naturalness, and finally, the fourth one was about healthiness, which is also associated with naturalness.

To test the third hypothesis (H3: Feeling of trust mediates the effect of country-of-origin on the perception of naturalness by the consumer, such that, when the country-of-origin is the home-country of the consumer a feeling of trust in the COO is activated. Subsequently, the feeling of trust in the COO leads to an increased perception of naturalness on the product by the consumer) participants were requested to answer to some questions about naturalness. Specific Likert-scale questions were asked to the participants, considering the country-of-origin of the fresh product (The Netherlands, Belgium, or France). To test the feeling of trust of the consumers, the participants were requested to select their level of agreement with determinate statements, such as "I trust the country-of-origin of this lettuce; "The country-of-origin of this lettuce is very reliable"; "I believe that the processes to produce this lettuce in this country are trustworthy" and "The fresh products from this country can be trusted". These questions were formulated based on previous research (Jiménez & Martín, 2014). In order to follow a thoughtful sequence, these statements were placed in this order in the survey. The first and second statements are used to test the participants' trust in the countryof-origin. In addition, the third statement aims to measure the respondents' level of trust in the country's manufacturing processes. Finally, the fourth statement is more thorough and focuses on the participants' level of trust in fresh products of the countryof-origin of the lettuce.

3.2 Survey Requirements

The survey began with a small description of the purpose of the survey and asked for participants' permission to proceed. In the introduction, it was explained the reason why the survey was only designated for Dutch people and Dutch residents, considering a study on Dutch consumer behavior. Thereupon, respondents were asked if they were from The Netherlands and if they were currently living in The Netherlands. For the participants that answered "No", the questionnaire ended right away. For the people that met the requirements, the survey continued and was followed by one of the six conditions, distributed randomly, regarding different prices and countries-of-origin.

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3.3 Manipulation Check and Control variables

As part of the manipulation check, two questions were asked at the end of the survey. The purpose of asking these questions is to test if respondents were attentive to the country-of-origin of the lettuce, as well as the price level of the lettuce. For the participants that do not answer correctly to both questions, their survey answers were not considered.

The manipulation check for the awareness of country-of-origin was measured with one multiple-choice question. The question asked was "from which country was the lettuce that you were looking at in the survey?". The multiple-choice question had five different options. Three of them contained the three possible countries-of-origin of the survey, The Netherlands, Belgium, or France. In addition, to have some diversity among the options, one fake choice was also added, represented by Germany. Lastly, "none of the above" was the fifth option of the question.

In the same way, it was asked to the participants about the price level of the observed lettuce. The question was "what was the price of the lettuce that you were looking at in the survey?" and contained four possible choices. Two options included the real conditions in the survey, "comparable to the average price in the market" and "50 cents higher than the average price in the market", and, in the same way as before, a fake option was also included, represented by "50 cents lower than the average price in the market". Finally, an option with "none of the above" was also present in the question.

Furthermore, the control variables are age, gender, and frequency to purchase lettuce. Three questions, about the control variables, at the end of the survey assisted this research. It was asked to the participants, on a scale from 1 (Very infrequently) to 7 (Very frequently), what was their frequency to purchase lettuce. Likewise, multiple-choice questions regarding age and gender were asked to the respondents. The multiple-choice question concerning age had five possible options, considering five different age groups. The age divisions were "<18 years old", "18-34 years old", "35-54 years old", "55-74 years old" and, ">75 years old". Similarly, the multiple-choice question regarding gender contained four different options, such as "Male", "Female", "Other" and "Prefer not to say".

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3.4 Model specification

The survey was primarily shared through social media and shared among friends and students. However, with this first technique, gathering 210 Dutch respondents who replied correctly to the manipulation check questions proved to be challenging. As a result, additional techniques were employed. Accordingly, random people were approached and requested to scan the QR code of the survey and fill it in, at the entrances of a few supermarkets and at Rotterdam Central Station. Additionally, Dutch students were asked to participate in the survey on the campus of the Erasmus University Rotterdam.

The data was analyzed in SPSS, through an ANOVA test for the main effect and through Model 1 and Model 5 of PROCESS for the moderation effect and mediation effect, respectively.

The dependent variable, the perception of naturalness by the consumer, is a continuous variable, measured in Likert-scale questions, while the independent variable, the country-of-origin is categorical. Thus, the appropriate model to study the main effect is an ANOVA test.

Moreover, to study the moderation effect, the SPSS program named PROCESS, more specifically the model 1 from Hayes models (see *Figure 3*), served the research, in which the dependent variable, perception of naturalness by the consumer, measured in Likert-scale questions, is continuous, and the independent variable, the price (moderator), is categorical, assuming two conditions (average and inflated price).



Figure 3- Model 1 of PROCESS from Hayes models

Finally, for the mediation, the model 5 of PROCESS (see *Figure 4*), from Hayes models, served to discover if the feeling of trust towards a country would mediates the main effect. In this case, both the feeling of trust and the perception of naturalness by the consumer were measured in seven-point Likert scale questions, therefore are continuous.



Figure 4- Model 5 of PROCESS from Hayes models

4. Results

In this chapter the results and data collected obtained from a quantitative study will be discussed and analysed.

From 25th of March to 5th of April, a Qualtrics survey was available online. In total, 377 people started the questionnaire, in which 279 of them finished the survey. The completion rate was 74%. Furthermore, from the 279 respondents that finished the survey, 210 were from The Netherlands and answered correctly to the manipulation check, revealing attention to the problem presented in the survey. From the 69 non validated answers, 10 respondents were not Dutch and the remain respondents did not answer correctly to the COO and price level of their condition. Individually, the six between subject conditions obtained 35 validated responses, considering the minimum amount of 30 respondents to authenticate the research.

4.1 Data Description

The number of participants considered for this study's analysis is 210 people, all of whom passed the manipulation check and are from the Netherlands. The sample is composed by 48,6% of male respondents, 47,6% of female respondents and 2,4% and 1,4% of other gender and people who preferred not to say their gender respondents, respectively. The gender distribution of the sample can be observed in *Figure 5*.



Figure 5- Gender Distribution

Moreover, the participants were divided in five different age groups, represented in *Figure 6.* Most of the participants are aged between 18 and 34 years-old, representing 61,9% of the sample. Additionally, four people are under 18 years old, forty-four are aged between 35 and 54 years-old, thirty-one between 55 and 74 years-old and, finally, one participant is above 74 years-old.



<18 years old = 18-34 years old = 35-54 years old = 55-74 years old = >74 years old

In terms of the participants' frequency to purchase lettuce, rated in a seven-point Likert scale question, 7,6% of the respondents buy it very infrequently and 9,5% buy it very frequently. The distribution of the frequency of lettuce purchase is demonstrated in *Figure 7*.

Additionally, looking at *Table 1*, it is observed that the mean of the Frequency to purchase lettuce of the consumers is 4,22, in a seven-point Likert scale, and that the standard deviation is 1,73 points.

Figure 6- Age Distribution

Frequency to purchase lettuce



Figure 7- Frequency to purchase lettuce Distribution

Table 1- Mean and Std. Deviation of theFrequency to purchase lettuce

Mean	Std. Deviation
4,22	1,73

4.2 Reliability test

With the purpose of confirming the internal consistency of this study and check the validity of the scales used, a reliability test in SPSS was executed. The most common measure used in reliability tests is the Cronbach's Alpha, and the index is considered reliable when it is above 0,70 (Ferketich, 1990). In this research, the Cronbach's Alpha will be used to test if the Naturalness Likert-scale questions and the Trust Likert-scale questions are closely related between them, in order to establish reliability.

To test the naturalness perception of the participants, six different seven-point Likertscale questions were presented to the respondents. The Cronbach's Alpha of Naturalness is 0,89 (see *Appendix II*), which is above 0,70, confirming that the measurement of the naturalness perception of the respondents is internally consistent. Additionally, it is observed that there is no specific question that creates a significant difference when it is not present, as it can be understood in *Table 2*- Cronbach's Alpha if Item Deleted of the Naturalness variable.

Naturainess Variable	
Nat_1	0,88
Nat_2	0,86
Nat_3	0,86
Nat_4	0,88
Nat_5	0,86
Nat_6	0,88

Table 2- Cronbach's Alpha if Item Deleted of

Furthermore, the mediator of the study is measured by four different seven-point Likertscale questions to perceive the level of trust of the participants in the country-of-origin of the lettuce. For instance, the Cronbach's Alpha of the mediator is 0,95 (see *Appendix II*), which is substantially higher than the 0,70 minimum reference. Similarly, there is no significant difference between the four trust statements when one of them is excluded from the study (see *Table 3*), which confirms the reliability and consistency of the questions.

Trust_1	0,94
Trust_2	0,93
Trust_3	0,93
Trust_4	0,94

Table 3- Cronbach's Alpha if Item Deleted of Trust Variable

4.3 Results for Hypothesis 1

The first Hypothesis theorizes that the perception of naturalness of a consumer from The Netherlands is influenced by the country-of-origin of the product, in this case a lettuce, such that when the fresh product is domestic-made, consumers will perceive it as more natural. The responses to the naturalness seven-point Likert Scale questions were compared across three different countries: The Netherlands, Belgium and France. The purpose of this comparison was to understand if the perception of naturalness of the lettuce from The Netherlands was higher compared to the other two countries. To test the first Hypothesis, an ANOVA test served to investigate the main effect of the research.

The ANOVA test considered the continuous variable "NAT" as the dependent variable, for the mean of the six statements in seven-point Likert scale questions, and the categorical variable "COO", which assumed three values, "1" for The Netherlands, "2" for Belgium and "3" for France. An overview of the results of Hypothesis 1 is presented in *Table 4 and Table 5*, which confirms that the country-of-origin effect in the consumer perception of naturalness is significant (M (Netherlands) = 4,66; M (Belgium)= 3,77; M (France)= 3,82; SD(Netherlands)=1,12; SD(Belgium)=1,24; SD(France)=1,27); F (2, 207) = 11,84, p-value < 0,001).

Table 4- Results of the ANOVA test

	Sum of		Mean	_	
	Squares	df Squar		F	Sig.
Between Groups	34,87	2	17,43	11,84	<,001
Within Groups	304,70	207	1,47		
Total	339,57	209			

Table 5- Results of the ANOVA test

-					95% CI	
	Ν	Mean	Std. Deviation	Std. Error	Lower	Bound/
					Upper	Bound
Netherlands	70	4,66	1,12	0,13	4,39	4,92
Belgium	70	3,77	1,24	0,15	3,47	4,06
France	70	3,82	1,27	0,15	3,52	4,12
Total	210	4,08	1,27	0,09	3,91	4,26

Furthermore, in the post-hoc analysis "Bonferroni Multiple Comparisons" (see *Table 6*), a positive significant difference is observed (p-value < 0,001) between the perception of naturalness of the lettuce from The Netherlands and the perception of naturalness of a lettuce from Belgium, considering a difference in means of 0,89. Likewise, the effect of country-of-origin on the perception of naturalness is also significant (p-value= <0,001) for the lettuce from The Netherlands when compared to the lettuce from France, with a positive mean difference of 0,84. Additionally, there is no significant difference between the perception of naturalness of the lettuce from Belgium compared to the perception of naturalness of the lettuce from Belgium compared to the lettuce from Belgium compared to the perception of naturalness of a lettuce from Belgium compared to the perception of naturalness of a lettuce from Belgium compared to the perception of naturalness of a lettuce from Belgium compared to the perception of naturalness of a lettuce from France (p-value= 1,00).

		Mean			
COO		Difference	Std. Error	Sig.	
Netherlands	Belgium	0,89	0,21	0,00	
	France	0,84	0,21	0,00	
Belgium	Netherlands	-0,89	0,21	0,00	
	France	-0,05	0,21	1,00	
France	Netherlands	-0,84	0,21	0,00	
	Belgium	0,05	0,21	1,00	

Table 6- Bonferroni Comparisons Between COO

The means plots graph presented below (*Figure 8*) demonstrates the difference in means between the perception of naturalness given by a Dutch citizen of a lettuce from their home-country compared to a lettuce from Belgium and from France. There is a clear difference between the mean of the naturalness perception of the lettuce from The Netherlands compared to lettuce from the two other foreign countries. *Figure 8* shows that the mean of the naturalness perception of the lettuce from The Netherlands is higher than the mean of the naturalness perception of the lettuce from both Belgium and France (M (Netherlands) = 4,66; M (Belgium)= 3,77; M (France)= 3,82). Therefore, the ANOVA test significantly supports the first hypothesis.



Means Plot- Naturalness Perception

Figure 8- Means Plot Naturalness Perception of each COO

4.4 Results for Hypothesis 2

For the moderation analysis, the model 1 in PROCESS Macro, from Hayes models, served to determine if the variable price moderates the relationship between variable X and variable Y (Hayes, 2018). Moreover, this model was chosen over model 5 to analyse the effect of the moderation by itself, excluding the possibility of an interference of price moderating the mediator trust, and influence the final results of the moderation.

The moderator price variable was formed into a new variable. The variable is categorical and assumes two values, "1" for the participants that received a condition of a lettuce with an average price level in the market and "2" for the respondents that observed a condition of the lettuce with an inflated price in the market, more specifically, 50 cents higher than the average price of a lettuce in the market.

Furthermore, to test the Hypothesis 2, the variable "COO" was treated as a multicategorical variable, resulting in two dummy variables, assuming "X1" for the cases where the responses of the participants that receive a lettuce from Belgium are being compared to the responses of the participants that received a lettuce from The Netherlands, and "X2" for the comparison between the results gathered from the participants that obtained a condition with a lettuce from France and the participants

that gathered a condition with a lettuce from The Netherlands. Therefore, the baseline for the COO variable is The Netherlands.

Considering model 1 of PROCESS, demonstrated in *Table 7*, which assumes the variable perception of naturalness as the dependent variable, the main effect is revalidated (p-value "X1" = 0,00; p-value "X2" = 0,00). Aligned with the previous results, the signs of X1 and X2 are negative ($\beta(X1)$ = -2,52; $\beta(X2)$ = -1,90), confirming that the naturalness perception of the lettuce from Belgium and from France is lower compared to the naturalness perception of the lettuce from The Netherlands.

Variable	Coefficient	Std. Error	t-value	p-value	
constant	4,10	0,41	9,90	0,00	
X1	-2,52	0,59	-4,30	0,00	
X2	-1,90	0,59	-3,24	0,00	
Price	0,37	0,26	1,42	0,16	
Int_1	1,08	0,37	2,93	0,00	
Int_2	0,71	0,37	1,92	0,06	

Table 7- Results of the Naturalness Outcome Variable- Model 1 of PROCESS

The variables "Int_1" and "Int_2" reveal the interaction effect of X1 and Price (Int_1) and the interaction effect of X2 and Price (Int_2) on the naturalness perception of the consumers. In order to access the moderating role of price in the relationship between country-of-origin effects and perception of naturalness, the interaction variables determine the validity of the moderator. Therefore, observing *Table 7*, it is concluded that the interaction between X1 and Price ("Int_1") on the naturalness perception is significant, with a positive coefficient of 1,08. Therefore, price is a significant moderator in this relationship (p-value= 0,00). Additionally, the interaction between X2 and Price ("Int_2") on the naturalness perception is not significant at a confidence level of 95 per cent. However, the interaction is marginally significant, with a positive coefficient of 0,71. Thus, price is a marginal significant moderator of this relationship (p-value= 0,06).

In the same way, in the "test of highest order unconditional interaction" (see *Table 8*), it is observed that the interaction between the COO and Price is significant, which means

that the moderator price is a significant moderator for the main effect of this research (p-value= 0,01).

	R2-chng	F	p-value	
X*W	0,01	3,54	0,03	

Table 8- Test of highest order unconditionalinteraction- Model 1 of PROCESS

For this reason, the first part of H2 "The price of the fresh product moderates the effect of the country-of-origin on the perception of naturalness by the consumers" is accepted.

Additionally, the conditional effects of each price level (1= average price and 2=higher price) and each country condition (X1 and X2) on the naturalness perception of the consumers are demonstrated in *Table 9*. When the moderator price is equal to 1, i.e., average price of a lettuce in the market, the effect of COO on the naturalness perception of the consumers is significant for both X1 and X2, at a confidence level of 95 per cent (p-value= 0,00). Moreover, the coefficient for X1 is -1,43 and the coefficient for X2 is -1,19, which means that when the lettuce is from The Netherlands and has an average price, consumers perceive it as more natural compared to the lettuces from Belgium and from France, at the same price level.

On the other hand, when the variable price has level 2, i.e., 50 cents higher than average price of a lettuce in the market, the effect of the COO on the naturalness perception of the consumers is not significant for "X1", at a confidence level of 95 per cent (p-value= 0,19). Therefore, there is no significant difference between the naturalness perception given to a lettuce from Belgium compared to a lettuce from The Netherlands, at a higher price in the market, which reveals an attenuation of the main effect, confirming H2.1.

However, for "X2"- the comparison of the results obtained from the participants who received a condition with a lettuce from France with those who obtained a condition with a lettuce from the Netherlands, the effect of COO on the naturalness perception of the consumers is not significant at a 95 per cent confidence level. However, it is marginally significant (p-value= 0,07). The coefficient of X2 is -0,48, which means that

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when the price level of the lettuce is inflated, the perception of naturalness of the lettuce from France is lower than the naturalness perception of a lettuce from The Netherlands (see *Table 9*). However, when compared to the coefficient of X2 when the variable price has level 1, there is a decrease in the difference between the perception of naturalness between the lettuces from France and The Netherlands, which means that the main effect is attenuated, supporting H2.2.

Moderator Value	Х	Coefficient	p-value
1	X1	-1,43	0,00
1	X2	-1,19	0,00
2	X1	-0,34	0,19
2	X2	-0,48	0,07

Table 9- Effect of the Moderator Price on X1 and X2- Model 1 of PROCESS

Having this in mind, the hypothesis **H2:** "The price of the fresh product moderates the effect of the country-of-origin on the perception of naturalness by the consumers, such that the main effect is attenuated when the price of the foreign product is at a high level. Specifically, when the lettuce is from The Netherlands and has an average price, the perception of naturalness of this lettuce will be higher compared to the lettuces from Belgium and France with an average price as well. However, when the lettuces have an inflated price, the main effect will be attenuated" is accepted (M (Netherlands, average price)= 4,47; M (Netherlands, inflated price)= 4,84; M (Belgium, average price) = 3,04; M (Belgium, inflated price)= 4,50; M (France, average price)= 3,28; M (France, inflated price)= 1,38; SD (Netherlands, average price)= 1,14; SD (Belgium, inflated price)= 0,87; SD (France, average price)= 0,71).

4.5 Results for Hypothesis 3

To test the third hypothesis, the model 5 of PROCESS, from Hayes models, served this research, which combines the moderator and the mediator variables. In this model, the indirect effects of *X* on *Y* are studied through the mediator trust (Hayes, 2013).

Following the previous framework, the independent variable COO assumes "X1" for Belgium versus The Netherlands and "X2" for France versus The Netherlands. In *Table 10*, it is observed that "COO" is a negative significant predictor of the level of Trust of X1 and X2 (p-value= 0,000). Specifically, for consumers that received a condition with a lettuce from Belgium, the level of trust is significantly more negative compared to the level of trust given to The Netherlands by the respective participants (β (X1)= -1,97; p-value "X1" = 0,00). Similarly, the same effect happens when the participants received the lettuce from The Netherlands to the participants that received the lettuce from The Netherlands (β (X2)= -1,88; p-value "X2" = 0,00).

Table 10- Results of the Trust OutcomeVariable- Model 5 of PROCESS

Variable	Coefficient	p-value
Constant	5,59	0,00
X1	-1,97	0,00
X2	-1,88	0,00

The mediator "Trust" is statistically significant (p-value= 0,00) for the main effect and positively explains the relationship between the perception of naturalness and country-of-origin effects, with a coefficient of 0,50- see *Table 11*.

Table 11- Outcome Variable- Natural

		Std.	р-
Variable	Coefficient	Error	value
Constant	1,18	0,40	0,00
Trust	0,50	0,04	0,00

4.5.1 Direct and Indirect Effects- Mediating Role

Moreover, the direct effects of the country-of-origin on the perception of naturalness, as shown in *Table 12*, are significant for people who perceived the naturalness of a lettuce from Belgium at a higher price in the market versus those who perceived the

naturalness of a lettuce from The Netherlands at an inflated price. Therefore, trust plays a partial mediating role in this relationship, given the significant direct effect of X on Y (p-value= 0,0255).

Table 12- Direct Effect of X on Y

Variable	Price	Coefficient	p-value
X1	1	-0,28	0,20
X1	2	0,48	0,03
X2	1	-0,07	0,74
X2	2	0,28	0,18

On the other hand, the relationship between naturalness perception and country-oforigin becomes fully mediated by trust for the people that received a condition of a lettuce from Belgium at an average price (X1 at Price=1) and the people that received a lettuce from France at both prices (X2 at Price=1 and X2 at a Price=2), compared to the people that received a lettuce from The Netherlands at the respective price. The mediator trust fully explains the main effect in these specific cases because the direct effects of X1 when the price is equal to 1 and the direct effects of X2 for both price levels are not statistically significant (see *Table 12*), while the indirect effects are significant for both X1 and X2, since the value zero is not present between BootLLCI and BootULCI (see *Table 13*).

Table13-IndirectEffectofXonYCOO --->Trust --->Naturalness

Variable	Coefficient	BootLLCI	BootULCI
X1	-0,99	-1,28	-0,72
X2	-0,94	-1,21	-0,69

It is concluded that for higher levels of trust on the country-of-origin, there is a higher level of naturalness perception by the consumer, which explains the main effect. Therefore, the H3: "Feeling of trust mediates the effect of country-of-origin on the perception of naturalness by the consumer, such that, when the country-of-origin is the home-country of the consumer a feeling of trust in the COO is activated. Subsequently, the feeling of trust in the COO leads to an increased perception of naturalness on the product by the consumer" is accepted.

4.6 Control Variables

In the first subchapter of the results chapter, the data collected from the survey was described and differentiated in three diverse points. The participants were asked to inform about their age group, related gender, and their level of frequency to purchase lettuce. These three variables were controlled using a Univariate analysis in SPSS-*Table 14*, in order to discover if they influence the main effect of the research.

After observing the results of the Univariate Analysis (see *Table 14*), having in consideration the covariates- "Freq", "Age" and "Gender", it can be concluded that the three variables do not affect the main effect. At a confidence level of 95 per cent, the control variables are not statistically significant for the research (p-value "Freq" = 0,54; p-value "Age" = 0,13; p-value "Gender" = 0,89).

	Mean				
	Square	F	p-value		
Intercept	239,34	168,47	<0,01		
COO	20,24	14,25	<0,01		
Freq	0,53	0,38	0,54		
Age	2,68	1,89	0,13		
Gender	0,17	0,12	0,89		

Table14-TestsofBetween-SubjectsEffects-Univariate Analysis

5. General Discussion

This research aims to fill the gap of the possible naturalness cues that influence the consumer perception of a specific product. Particularly, how the country-of-origin of a product impacts its naturalness perception.

In this final chapter, the main research question and the sub-research questions will be answered. Furthermore, the academic and managerial implications will be discussed and, finally, the limitations of this research and the recommendations for future research will be presented.

5.1 Research Questions

The purpose of this research is to discover the effects of the COO on the naturalness perception by the consumer. Literature has proven that the country-of-origin label has an influence on consumers' behaviour (Schooler, 1965). In the same way, theory confirms that, nowadays, there is a higher consideration and desire for natural products by consumers (Rozin, et al., 2004). Therefore, this study is focused on determining if consumers when buying fresh products in their home-countries perceive them as more natural, compared to the same product made in a foreign country. For this reason, the ultimate goal of this research is to answer to this question:

"Does the country-of-origin of "fresh products" influence the naturalness perception by the consumer?"

The results of the quantitative study, conducted to answer the problem, revealed that the main effect is significant. Therefore, it is concluded that the perception of naturalness varies towards different country-of-origin contexts. More specifically, that people from The Netherlands consider fresh products, made in their country, to be more natural than fresh products produced in a foreign country, in this case, in Belgium and France. The mean of the variable naturalness, that measured the level of naturalness perception by the consumer, demonstrates that there are higher attributions for the Dutch lettuce. The mean of the variable "NAT" (naturalness perception of the consumer) was of 4,66 points for the lettuce from The Netherlands, in a seven-point Likert scale. In addition, the mean of the variable "NAT" for the lettuce from Belgium was of 3,77 points, in a seven-point Likert scale and, finally, the mean of "NAT" for the lettuce from France was 3,82 points, in a seven-point Likert scale.

Thereby, having these results in mind, it is possible to answer to the main research question: yes, the country-of-origin of "fresh products" influences the naturalness perception of the consumer, such that when the product is from the consumers' homecountry, there is a higher perception of naturalness.

Moreover, other aspects of the main relationship were considered. Firstly, it was proposed that price would moderate the COO effects on the naturalness perception by the consumers, such that higher prices would attenuate the main effect. Thus, the first sub-research question was asked:

"Does the price of fresh products moderate the effect of country-of-origin on the perception of naturalness by the consumers?"

After analysing the results of the quantitative study, it is concluded that price plays a moderating role in this relationship. As expected, when the price of the lettuce was inflated, the main effect was attenuated, i.e., the impact of the COO effects on the naturalness perception of the consumer was weakened.

More specifically, when the lettuce from The Netherlands was compared to the lettuce from Belgium, at an inflated price, the main effect was faded, and price played a moderating role. The difference in means of the naturalness perception of the lettuce from The Netherlands versus the lettuce from Belgium, with an average price, was of 1,43 points in a seven-point Likert scale, while the difference in means of the lettuce from The Netherlands compared to the lettuce from Belgium, at an inflated price, was only of 0,34 points in a seven-point Likert scale, which was not statistically significant (M (Netherlands, average price)= 4,47; M (Netherlands, inflated price)= 4,84; M (Belgium, average price) = 3,04; M (Belgium, inflated price)= 4,50; SD (Netherlands, average price)= 0,76; SD (Netherlands, inflated price)= 1,38; SD (Belgium, average price)= 1,14; SD (Belgium, inflated price)= 0,87; p-value(Int_1)= 0,00; p-value(X1, average price)=0,00; p-value(X1, inflated price)= 0,19).

Furthermore, price is a marginal significant moderator of the relationship between the naturalness perception by the consumer and COO effects when the lettuce from The Netherlands is compared to the lettuce from France. Likewise, the difference in means for the conditions with an inflated price were less expressive than the difference in means of the lettuces from The Netherlands and France with an average price. The difference in means when the lettuces were at an average price level was of 1,19 points, in a seven-point Likert scale. On the other hand, 0,48 points was the difference in means when the lettuces were at an inflated price level, which was only marginally significant (M (Netherlands, average price)= 4,47; M (Netherlands, inflated price)= 4,84; M (France, average price)= 3,28; M (France, inflated price) = 4,36; SD (Netherlands, average price)= 0,76; SD (Netherlands, inflated price)= 1,38; SD (France, average price)= 1,47; SD (France, inflated price)= 0,71; p-value(Int_2)= 0,06; p-value(X2, average price)= 0,00; p-value(X2, inflated price)= 0,07).

According to the results, it is possible to answer to the first sub-research question: yes, price moderates the effect of country-of-origin on the perception of naturalness by the consumers.

Finally, this research hypothesized that trust explains the relationship between countryof-origin of a product and the perception of naturalness by the consumer. More specifically, it is proposed that if the COO label is the home-country of the consumer, a feeling of trust in the COO emerges. Then, the feeling of trust in the COO leads to an increased perception of naturalness on the product by the consumer. Accordingly, the second sub-research question is asked:

"Does the feeling of trust mediate the effect of country-of-origin on the perception of naturalness by the consumers?"

The experiment made revealed that trust is a significant mediator in the main relationship. The feeling of trust is a positive explanator of the COO effects on the

naturalness perception by the consumer, such that when the consumer highly trusts on the country-of-origin of the product, there is a higher perception of naturalness on the product too.

Additionally, besides the partial mediating role of trust for X1 at Price 2 (see *Table 12*), trust becomes a fully mediator for X1 at Price 1 and X2 at Price 1 and 2. More specifically, for the cases where the condition of the lettuce from Belgium is compared to the condition of the lettuce from The Netherlands, at an inflated price, and for the cases where the condition of the lettuce from France is compared to the condition of the lettuce from The Netherlands, at both price levels. In these cases, the feeling of trust towards the country-of-origin explains 100% of the effect of the independent variable.

Consequently, the second sub-research question can be answered: yes, the feeling of trust on the country-of-origin of the product mediates the main effect.

5.2 Managerial Implications

This research shows how consumers are influenced by the country-of-origin of fresh products when evaluating its naturalness level. Consumers perceive products as more natural and trust more on products that are made in their home-countries. Therefore, companies would benefit from producing their products in the home-country of the majority of their consumers. Consequently, companies can consider this finding and, if feasible, change their manufacture location.

It is easier to determine where to manufacture products, especially for new businesses that are not established yet, in order to transmit a higher perception of naturalness. In these situations, the best course of action is to research the market and establish the company's target market. After determining the target market, factors such as the targeted audience's nationality and place of residence, in addition to the usual considerations, should be considered when deciding where to produce a product.

Furthermore, for businesses that cannot relocate their manufacturing operations, the easiest method to exhibit naturalness is to raise the price of their products, making them "premium". In this scenario, the importance of the COO of the product would be

reduced, and customers would see the product as more natural just by paying a greater price.

Moreover, the corporations that are unable to locate their productions in the countryof-origin of the majority of their customers should select the country of production considering the level of trust of their target audience on that country, since it was proven that trust explains the relationship between country-of-origin effects and naturalness perception.

According to the rising preference for naturalness, if a company and its products are perceived as more natural there could be an increase in purchase intention, contributing for a growth in sales.

5.3 Academic Implications

This thesis contributes to the naturalness cues that influence the consumer behaviour. Prior research has shed light on several naturalness cues that impact the consumer perception, such as the packaging, the point of purchase (supermarkets versus traditional markets), ecological labels, firm size and artificial colours and flavours present in a product (Binninger, 2017; Lunardo & Saintives, 2013; Scekic & Krishna, 2020; Murley & Chambers, 2019). Therefore, the COO feature becomes a new naturalness cue influencing the consumer behaviour in the point of purchase, contributing for the existing literature, such that when a product is from the home-country of the consumer, there will be a higher naturalness perception by the consumer.

On the other hand, the COO effects literature becomes richer with this thesis. The outcome of this research is in harmony with the findings of Schooler (1965), which implied that products with the same characteristics besides the COO label would have different product evaluations (Schooler, 1965). Likewise, in this study, products with the same price level but from different countries were evaluated differently. In addition, the answers of the respondents of the quantitative study of this research corroborate the findings of the 2017 Nielson study, which found that consumers prefer products that are made in their home-country, especially fresh products (Nielsen, 2017).

Furthermore, the findings of this research on the impact of price on customer behaviour are consistent with previous studies. As Haws, Reczek and Sample discovered, price influences consumers' decision making, such that there is an association with a healthiness perception when price is at higher levels (Haws, Reczek, & Sample, 2016). In this research, the naturalness perception was paralleled to the healthiness perception of this prior research, and both converged on equivalent conclusions.

Finally, the results found in this study are aligned with the research made in 2014, by Jiménez and Martín, in which the mediating role of trust in COO effects was disclosed (Jiménez & Martín, 2014). Trust has been found to be a mediator in COO effects once more, this time in relation to naturalness perception, adding to the current literature.

5.4 Limitations and Future Research

Even though this research has brough interesting insights, there are some limitations to it as well as possible directions for future research.

Country-of-origin of the product

First, when analysing the country-of-origin effects on the naturalness perception by the consumer, this research only considers two other countries besides The Netherlands, which are Belgium and France. Thus, other foreign countries were not investigated in this research, which could have changed the consumers' naturalness perception of the product. For future research, to obtain a wider perspective, more countries could be included in the same experiment. In addition, only European countries with similar characteristics as The Netherlands were involved in the study. To perceive the differences in the consumers' naturalness perception on products between countries from different continents is also an interesting research path to pursue, since the differences in wealth, agriculture and social conditions would have impacted the main effect as well and needed to be considered.

Furthermore, the base for this research was The Netherlands which limited the research to other participants with other nationalities. Future research could repeat the experiment with another country perspective, besides The Netherlands.

Fresh Products

This thesis aims to study the influence of COO effects on the naturalness perception of fresh products. However, fresh products include a wide range of vegetables and fruits, and in this research only a lettuce was used to represent this food section. This could limit the research, such that people could have a specific attitude towards lettuce that differ from the attitude towards other vegetables and fruits. To overcome this bias, future research could study the COO effects on the naturalness perception of other vegetable or fruit. Additionally, another suggested direction of research could be to study the effects of COO labels on the consumers' naturalness perception, not only including other food segments, but also including other segments besides food, like cosmetics and home care products, for example.

Sample

The conceptual model of this research contained six different conditions in a betweensubject design. The sample size of the research was 210 participants, 35 to each condition. In the future, the same experiment could be repeated but with a larger audience, in order to obtain more reliable results.

Furthermore, the majority of the respondents are aged between 18 and 34 years-old (62%), which limits the age variation of the research. A suggestion for future research could be to perform the quantitative study with participants with a balanced age variation.

Survey

The quantitative study was performed online in Qualtrics platform. The environment in which the respondents are inserted is different from the real scenario of a supermarket, which limits the study. The naturalness perception of the consumers could change by actually being in a supermarket and having other products to compare. In this way, it could be beneficial to perform the same experiment in a real supermarket, with all the external factors included.

Moderators and Mediators

Finally, there are numerous moderators and mediators that could be included in future research to understand what the impact of them in the COO effects on the naturalness perception of the consumer would be. As an example, the level of nationalism of the consumer could serve as a moderator to explore in future research, such that higher levels of nationalism would influence the relationship between COO effects and naturalness perception, resulting in a higher naturalness perception by the consumer.

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Appendix I- Data Descriptives

Table A.1- Age Descriptives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<18 years old	4	1,9	1,9	1,9
	18-34 years old	130	61,9	61,9	63,8
	35-54 years old	44	21,0	21,0	84,8
	55-74 years old	31	14,8	14,8	99,5
	>74 years old	1	,5	,5	100,0
	Total	210	100,0	100,0	

What is your age?

Table A.2- Frequency to purchase lettuce Descriptives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very infrequently 1	16	7,6	7,6	7,6
	2	27	12,9	12,9	20,5
	3	27	12,9	12,9	33,3
	4	36	17,1	17,1	50,5
	5	52	24,8	24,8	75,2
	6	32	15,2	15,2	90,5
	Very frequently 7	20	9,5	9,5	100,0
	Total	210	100,0	100,0	

How frequently do you purchase lettuce?

Table A.3- Gender Descriptives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	102	48,6	48,6	48,6
	Female	100	47,6	47,6	96,2
	Other	5	2,4	2,4	98,6
	Prefer not to say	3	1,4	1,4	100,0
	Total	210	100,0	100,0	

Descriptive Statistics

	Ν	Minimum	Maximum	Mean	Std. Deviation
Freq	210	1	7	4,22	1,734
Age	210	1	4	2,50	,772
Gender	210	1	3	1,55	,570
Valid N (listwise)	210				

Appendix II- Reliability Analysis

Table B.1- Reliability Analysis- Naturalness

Reliability Statistics

Cronbach's Alpha	N of Items
,889	6

Table B.1.1- Reliability Analysis- Naturalness (Item Statistics)

Item Statistics							
	Mean	Std. Deviation	N				
Nat_1	4,4762	1,60200	210				
Nat_2	4,0952	1,59559	210				
Nat_3	3,7476	1,73015	210				
Nat_4	3,2905	1,67629	210				
Nat_5	3,8143	1,56785	210				
Nat_6	5,0667	1,33604	210				

Table B.1.2- Reliability Analysis- Naturalness (Item-Total Statistics)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted				
Nat_1	20,0143	42,215	,659	,877				
Nat_2	20,3952	40,671	,750	,862				
Nat_3	20,7429	39,178	,753	,862				
Nat_4	21,2000	41,204	,673	,875				
Nat_5	20,6762	40,804	,760	,861				
Nat_6	19,4238	45,049	,650	,879				

Item-Total Statistics

Note: The Item-Total Statistics "Scale Mean If Item Deleted" is the sum of the six elements of naturalness excluding the one that is being studied. For example: "Scale Mean If Item Deleted" of Nat1= Mean Nat2 + Mean Nat3 + Mean Nat4 + Mean Nat5 + Mean Nat 6= 4,0952 + 3,7476 + 3,2905 + 3,8143 + 5,0667= 20,0143

Table B.1.3- Reliability Analysis- Naturalness (Scale Statistics)

Scale Statistics						
Mean	Variance	Std. Deviation	N of Items			
24,4905	58,490	7,64790	6			

Note: The "Scale Statistics" is the sum of all the means of the six elements of naturalness, so it is= Mean Nat1 + Mean Nat2 + Mean Nat3 + Mean Nat4 + Mean Nat5 + Mean Nat 6= 4,4762 + 4,0952 + 3,7476 + 3,2905 + 3,8143 + 5,0667 = 24,4905

Table B.2- Reliability Analysis- Trust

Reliability Statistics Cronbach's

Alpha	N of Items		
,949	4		

Table B.2.1- Reliability Analysis- Trust (Item Statistics)

Item Statistics							
Mean Std. Deviation N							
Trust_1	4,3952	1,81724	210				
Trust_2	4,2333	1,81114	210				
Trust_3	4,1381	1,84442	210				
Trust_4	4,4762	1,74496	210				

Table B.2.2- Reliability Analysis- Trust (Item-Total Statistics)

Rem-Fotal Statistics								
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted				
Trust_1	12,8476	25,843	,869	,935				
Trust_2	13,0095	25,598	,891	,929				
Trust_3	13,1048	25,453	,879	,933				
Trust_4	12,7667	26,553	,868,	,936				

Item-Total Statistics

Note: The Item-Total Statistics "Scale Mean If Item Deleted" is the sum of the four elements of trust excluding the one that is being studied.

Table B.2.3- Reliability Analysis- Trust (Scale Statistics)

Scale Statistics						
Mean	Variance	Std. Deviation	N of Items			
17,2429	45,209	6,72374	4			

Note: The "Scale Statistics" is the sum of all the means of the four elements of trust.

Appendix III- Oneway ANOVA

Table C.1- ANOVA Results

ANOVA

NAT					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34,869	2	17,434	11,844	<,001
Within Groups	304,700	207	1,472		
Total	339,569	209			

Table C.2- ANOVA Descriptives

Descriptives

NAT								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Netherlands	70	4,6571	1,12141	,13403	4,3898	4,9245	2,33	7,00
Belgium	70	3,7667	1,24476	,14878	3,4699	4,0635	1,00	6,33
France	70	3,8214	1,26845	,15161	3,5190	4,1239	1,33	6,50
Total	210	4,0817	1,27465	,08796	3,9083	4,2551	1,00	7,00

Table C.3- Post-Hoc Tests

Dependent Variable: NAT

Multiple Comparisons

			Mean Difference (I-			95% Confidence Interval	
	(I) COO	(J) COO	J)	Std. Error	Sig.	Lower Bound	Upper Bound
LSD	Netherlands	Belgium	,89048 [*]	,20508	<,001	,4862	1,2948
		France	,83571 [*]	,20508	<,001	,4314	1,2400
	Belgium	Netherlands	-,89048	,20508	<,001	-1,2948	-,4862
		France	-,05476	,20508	,790	-,4591	,3495
	France	Netherlands	-,83571 [*]	,20508	<,001	-1,2400	-,4314
		Belgium	,05476	,20508	,790	-,3495	,4591
Bonferroni	Netherlands	Belgium	,89048 [*]	,20508	<,001	,3955	1,3854
		France	,83571 [*]	,20508	<,001	,3407	1,3307
	Belgium	Netherlands	-,89048	,20508	<,001	-1,3854	-,3955
		France	-,05476	,20508	1,000	-,5497	,4402
	France	Netherlands	-,83571	,20508	<,001	-1,3307	-,3407
		Belgium	,05476	,20508	1,000	-,4402	,5497

*. The mean difference is significant at the 0.05 level.





Table C.4- Report of the means and standard deviations of the six conditions

		i coport		
NAT				
C00	Price	Mean	N	Std. Deviation
Netherlands	Average	4,4714	35	,75784
	Higher	4,8429	35	1,38086
	Total	4,6571	70	1,12141
Belgium	Average	3,0381	35	1,13622
	Higher	4,4952	35	,87212
	Total	3,7667	70	1,24476
France	Average	3,2810	35	1,47183
	Higher	4,3619	35	,70536
	Total	3,8214	70	1,26845
Total	Average	3,5968	105	1,30923
	Higher	4,5667	105	1,03739
	Total	4,0817	210	1,27465

Report

Appendix IV- PROCESS Output- Model 1

Run MATRIX procedure:

Written by Andrew F. Hayes, Ph.D. www.afhayes.com Documentation available in Hayes (2022). www.guilford.com/p/hayes3

***** Model : 1 Y : Natural Х : СОО W : Price Sample Size: 210 Coding of categorical X variable for analysis: COO X1 X2 1,000 ,000 ,000 2,000 1,000 ,000 3,000 ,000 1,000 ******* OUTCOME VARIABLE: Natural Model Summary R-sqMSEFdf1df2p,27941,199415,82245,0000204,0000,0000 R ,5286 Model р coeff se t LLCI ULCI 9,9048 4,1000 ,0000 3,2839 constant ,4139 4,9161 ,5854 -4,3031 ,0000 -3,6733 -1,3648 -2,5190 X1 -1,9000 ,5854 -3,2457 ,0014 -3,0542 X2 **-,**7458 ,3714 -,1447 ,8876 Price ,2618 1,4188 **,**1575 1,0857 ,3702 2,9325 ,0037 ,3557 Int 1 1,8157 ,7095 ,3702 1,9164 ,0567 -,0205 1,4395 Int 2 Product terms key: Int_1 : X1 x Price Int 2 : X2 x Price Test(s) of highest order unconditional interaction(s): R2-chng F df1 df2 p X*W ,0313 4,4348 2,0000 204,0000 ,0130 _____ Focal predict: COO (X) Mod var: Price (W)

Conditional effects of the focal predictor at values of the moderator(s):

Moderator value(s): Price 1,0000 se t p LLCI ,2618 -5,4750 ,0000 -1,9495 ULCI LLCI Effect -1,4333 X1 **-,**9172 -4,5473 ,0000 -1,1905 -1,7067 -,6743 ,2618 X2 Test of equality of conditional means df1 F df2 р 17,1713 2,0000 204,0000 ,0000 Estimated conditional means being compared: COO Natural 1,0000 4,4714 2,0000 3,0381 3,0000 3,2810 _____ Moderator value(s): Price 2,0000 ,2618 -1,3278 ,1857 Effect se LLCI ULCI X1 **-,**3476 -,8638 ,1686 X2 -,4810 ,2618 -1,8371 ,0676 -,9971 ,0352 Test of equality of conditional means F dfl df2 р 1,7992 2,0000 204,0000 ,1681 Estimated conditional means being compared: COO Natural 1,0000 4,8429 2,0000 4,4952 3,0000 4,3619 ********************** ANALYSIS NOTES AND ERRORS ******************************** Level of confidence for all confidence intervals in output: 95,0000 ----- END MATRIX -----

Appendix V- PROCESS Output- Model 5

Run MATRIX procedure: Written by Andrew F. Hayes, Ph.D. www.afhayes.com Documentation available in Hayes (2022). www.guilford.com/p/hayes3 Model : 5 Y : Natural х : соо M : Trust W : Price Sample Size: 210 Coding of categorical X variable for analysis: COO X1 X2 1,000 ,000 ,000 2,000 1,000 ,000 3,000 ,000 1,000 OUTCOME VARIABLE: Trust Model Summary MSE F R R-sq df1 df2 р ,2928 2,0174 42,8603 2,0000 207,0000 **,**5411 ,0000 Model se t coeff LLCI р ULCI ,0000 constant 5**,**5929 ,1698 32,9447 5,2582 5,9275 -1,9714 ,2401 -8,2114 ,0000 -2,4448 X1 -1,4981 ,2401 -7,8098 ,0000 -2,3483 X2 -1,8750 -1,4017 OUTCOME VARIABLE: Natural Model Summary R-sq MSE F df1 df2 R р

,762	.1 ,	5808	,7012	46,88	16	6,0000	203,000	0,0000
Model								
	coef	f	se	t		р	LLCI	ULCI
constant	1,179	0	,3983	2,9604	,0	034	,3937	1,9643
X1	-1,037	1	,4641	-2,2347	,0:	265	-1,9521	-,1220
X2	-,428	8	,4639	-,9244	, 3	564	-1,3434	,4858
Trust	,501	1	,0415	12,0815	,0	000	,4194	,5829
Price	,4503	2	,2003	2,2478	,0:	257	,0553	,8451
Int_1	,756	4	,2844	2,6597	,0	084	,1957	1,3171
Int_2	,355	1	,2846	1,2479	, 2	135	-,2060	,9163
Due duet to								
Trat 1	erms key:	V1		Drico				
INC_I	:	X1 X2	X	Price				
int_2	:	ΧZ	X	Price				
Test(s) of	highest	order	uncondit	ional int	eractio	n(s):		
R2-	chna	I	 -	df1	df2	(-)-	a	
X*W	0146	3,5431	L 2,0	000 203	,0000	,0	307	
Focal	predict:	C00	(X)					
	Mod var:	Price	(W)					
Conditiona	l effect:	s of th	ne focal j	predictor	at val	ues of	the moder	ator(s):
(These are	also the	e relat	cive cond	itional d	irect e	ffects	of X on Y)
Moderator	value(s)	:						
Price	1,0000							
Eff	ect	se		t	р	LL	CI U	LCI
X1 -,2	807	,2217	-1,26	59,	2070	-,71	79,1	565
X2 -,0	736	, 2205	-,33	40 ,	7387	-,50	84 ,3	611
Test of eq	uality o: _	t cond:	itional m	eans				
	F	dfl	df2		р			
,932	2,0	0000	203,0000	,39	54			
Fatimated	aanditio		na hoing	compared				
ESCIMALEO		ural med	ans being	compared	•			
1 000		7005						
2 000	, c c c c c c c c c c c c c c c c c c c	5082						
2,000	, c , c	7150						
3,000	JU 3,	1733						
Modorator								
Moderator	varue(S)	•						
rrice	∠,0000							

	Effect	se	t	р	LLCI	ULCI	
X1	,4757	,2114	2,2497	,0255	,0588	,8926	
X2	,2815	,2099	1,3413	,1813	-,1323	,6953	
Test	of equalit	cy of cond	itional mear	ıs			
	F	df1	df2	р			
	2,5388	2,0000	203,0000	,0815			
Estin	nated condi	itional mea	ans being co	ompared:			
	C00	Natural					
	1,0000	4,2397					
	2,0000	4,7154					
	3,0000	4,5212					
++++	· + + + + + + + + + + + + + + + + + + +		-			· + + + + + + + + + + + + + + + + + + +	+ +
~ ~ ~ ~ ~ /		DIREC.	E AND INDIRE	LCT EFFECTS	OF X ON I ^		~ ^
Relat	cive condit	cional dire	ect effect(s	s) of X on Y	:		
	Price	Effect	se	t	q	LLCI	
ULCI					±		
X1	1,0000	-,2807	,2217	-1,2659	,2070	-,7179	
,1565	5						
X1	2,0000	,4757	,2114	2,2497	,0255	,0588	
,8926	5		,	·	·	·	
X2	1,0000	-,0736	,2205	-,3340	,7387	-,5084	
,3611		·	·	·	·		
X2	2,0000	,2815	,2099	1,3413	,1813	-,1323	
,6953	3		,	·	·	·	
Relat	tive indire	ect effects	s of X on Y				
C00	->	> Trust	->	Natural			
	Effect	BootSE	BootLLCI	BootULCI			
X1	-,9880	,1406	-1,2837	-,7232			
X2	-, 9396	,1306	-1,2051	-,6913			
****	* * * * * * * * * * * *	********	ANALYSIS NO1	ES AND ERRO	RS *******	* * * * * * * * * * * * * * * * *	* *
T 7		1					
Level	OL CONTIC	lence Ior a	ail confider	ice interval	s in output		
95 ,	0000						
	C 1					, .	
Numbe	er of boots	strap sampl	les for perc	centile boot	strap confi	dence interval.	3:
500	0						

Appendix VI- Control Variables

 Table F.1- Univariate Analysis (Between-Subject Factors)

		Value Label	Ν
C00	1,00	Netherlands	70
	2,00	Belgium	70
	3,00	France	70
Age	1	<18 years old	4
	2	18-34 years old	130
	3	35-54 years old	44
	4	55-74 years old	32
Gender	1	Male	102
	2	Female	100
	3	Other	8

Between-Subjects Factors

Table F.2- Univariate Analysis (Descriptive Statistics)

Descriptive Statistics

Dependent Va	riable: NAT										
C00	Age	Gender	Mean	Std. Deviation	Ν						
Netherlands	<18 years old	Other	2,8333		1	France	<18 years old	Male	3,6667		1
		Total	2,8333		1			Total	3,6667		1
	18-34 years old	Male	4,5750	,70602	20		18-34 years old	Male	4,2160	1,24363	27
		Female	4,2414	1,01143	29			Female	3,7667	1,01340	15
		Other	5,1667	1,41421	2			Total	4,0556	1,17429	42
		Total	4,4085	,92335	51		35-54 years old	Male	3,4167	1,36423	4
	35-54 years old	Male	5,0556	1,68600	3			Female	3,5833	1,37345	12
		Female	5,3095	1,54988	7			Other	4,0000		1
		Other	5,5000	,94281	2			Total	3,5686	1,28973	17
		Total	5,2778	1,38960	12		55-74 years old	Male	3,3056	1,41192	6
	55-74 years old	Male	5,7333	,89443	5			Female	3,2500	1,96497	4
		Female	6,3333		1			Total	3,2833	1,54770	10
		Total	5,8333	,83666	6		Total	Male	3,9737	1,28781	38
	Total	Male	4,8333	,94062	28			Female	3,6290	1,25956	31
		Female	4,5000	1,21272	37			Other	4,0000		1
		Other	4,8333	1,41421	5			Total	3,8214	1,26845	70
		Total	4,6571	1,12141	70	Total	<18 years old	Male	2,9167	1,06066	2
Belgium	<18 years old	Male	2,1667		1			Female	2,5000		1
		Female	2,5000		1			Other	2,8333		1
		Total	2,3333	,23570	2			Total	2,7917	,64370	4
	18-34 years old	Male	4,0833	1,29004	18		18-34 years old	Male	4,2897	1,12163	65
		Female	3,9167	1,24492	18			Female	4,0323	1,08594	62
		Other	2,5000		1			Other	4,2778	1,83586	3
		Total	3,9595	1,25917	37			Total	4,1667	1,11832	130
	35-54 years old	Male	3,5556	1,04172	6		35-54 years old 55-74 years old Total	Male	3,8590	1,36396	13
		Female	3,2917	1,30855	8			Female	3,9444	1,58316	27
		Other	2,0000		1			Other	4,2500	1,74536	4
		Total	3,3111	1,17997	15			Total	3,9470	1,50270	44
	55-74 years old	Male	3,7576	1,25911	11			Male	4,0833	1,50286	22
		Female	4,3000	1,05013	5			Female	4,0833	1,63535	10
		Total	3,9271	1,19097	16			Total	4,0833	1,51870	32
	Total	Male	3,8426	1,24208	36			Male	4,1634	1,24633	102
		Female	3,7760	1,24406	32			Female	3,9983	1,28566	100
		Other	2,2500	,35355	2			Other	4,0833	1,58865	8
		Total	3,7667	1,24476	70			Total	4,0817	1,27465	210

Dependent Variable:	NAT				
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	81,012 ^a	27	3,000	2,112	,002
Intercept	239,342	1	239,342	168,474	<,001
Freq	,534	1	,534	,376	,541
C00	40,484	2	20,242	14,248	<,001
Age	8,045	3	2,682	1,888	,133
Gender	,331	2	,165	,116	,890
COO*Age	15,499	5	3,100	2,182	,058
COO * Gender	5,857	4	1,464	1,031	,393
Age * Gender	2,404	4	,601	,423	,792
COO * Age * Gender	1,141	5	,228	,161	,977
Error	258,557	182	1,421		
Total	3838,306	210			
Corrected Total	339,569	209			

Tests of Between-Subjects Effects

a. R Squared = ,239 (Adjusted R Squared = ,126)