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The Influence of Ethnocentrism in Food Neophobic Students

By

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A Capstone Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Service Leadership and Innovation

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ETHNOCENTRISM AND FOOD NEOPHOBIA

Abstract

Economic and social changes occurring after Croatia’s entrance to European Union require a more intense research on consumers’ openness to a new and globalized market. A concept known as Consumer Ethnocentrism, when consumers prefer buying domestic rather than foreign products because is detrimental to national economy, is strongly present in post-war markets in the West Balkans. Another phenomenon related to peoples’ fear of trying new or unknown food, called Food Neophobia, has been under study in America and in some European countries. Despite the long list of articles focusing their attention on Consumer Ethnocentrism in the Balkans, none research has been conducted on the food sector in Croatia, where a globalized and competitive market is opening and people’s phobias of trying unknown food may embarrass new businesses entrance.

This paper aims to analyze whether a relationship exists between those two concepts, thus trying to answer the main hypothesis: “Ethnocentrism is positively related to Food Neophobia”. Consumer Ethnocentrism Tendency and Food Neophobia scales were applied to 159 students from Zagreb University. Results indicate that Consumer Ethnocentrism and Food Neophobia have affected consumers’ choice in a discrete way, \((r = .28, r^2 = .08)\), however no significant relationship was found between them. In regard of differences on the level of Food Neophobia between gender, none statistically relevant difference was found \((t = 1.02, df = 60, p>.05)\), nor on the level of Ethnocentrism and Food Neophobia in students who have lived abroad \((t = -1.68, df = 67, p>.05)\). Implications of these findings for businesses interested in entering Croatian market for the first time are discussed.
Introduction

Food is one of the most essential items for human beings: it is part of the daily routine, biologically necessary to the proper functioning of the body, it is related with family traditions, may be the motive for a meeting with friends, it is the connection between mother and new born, might be the way to keep the roots and feel close to homeland after moving to a new country and to some people, food may also be the way to know more about a country during a trip. Because of all these factors, many researches have been done in the nourishment field trying to understand motives that lead people to consume food, especially choosing one product instead of another.

Going deeper on factors that can be classified as psychological and sociological (other factors which might influence the food choice are biologicals, economical and more) we would see that choice for one product over another could be taken based on the knowledge and familiarity the person has with ingredients, based on feelings of pride with a country or aversion to another and based on the desire of trying new cultures through food. In a study conducted by Dmitrovic, Vida and Reardon (2009) consumers’ behaviors toward products from other countries were found to be influenced by greater exposure to other cultures; during a trip or living abroad for example; resulting in a lower level of Ethnocentrism.

As explained by Sobal, Bisogni, Devine and Jastran (2006), 5 factors can influence the food choice: “ideals, personal factors, resources, social factors and contexts “(p. 5). They can happen jointly or separately. Personal factors take into consideration aspects related to the person itself, the environment where he/she lives, beliefs, life history and experiences, “personalities and phobias” (Sobal et al., 2006, p. 6).
Sobal et al. (2006) explained social factors as those influenced by social networks, such as friends, family, job relations, “communities and other social units” (p. 6). Playing an important role of evaluation on the social perspective we find Ethnocentrism, where “consumers prefer products from their home country to foreign alternatives” (Zeugner-Roth, Zabkar & Diamantopoulos, 2015, p. 25). In an attempt of studying factors that may have influence on Ethnocentric consumers, Parts and Vida (2011) found that exposition to knowledge about foreign countries (products and brands) directly affects individual’s ethnocentric tendencies, reducing consumer prejudice towards foreign alternatives.

An important factor of influence on the personal field, and which has been under study through past years, is known as Food Neophobia. Pliner and Salvy (2006) explained that as “a reluctance to ingest novel foods” (p. 75).

As quoted by Loewen and Pliner (2000) the degree of Food Neophobia can be affected by external factors such as age, with most acceptance in young people. Meiselman, Mastroianni, Buller and Edwards (1999) indicated gender as another factor of influence on degree of phobia, however no difference in means on Food Neophobia Scale [FNS] was found between men and women in their study. And, Flight, Leppard and Cox (2003) described the area where the person lives, rural or in urban cities, as a factor of Food Neophobia influence, with rural population displaying a higher degree of neophobia (all cited in Barrena & Sánchez, 2013).

In complement, a study conducted by Johns, Edwards and Hartwell (2011), showed that students who have lived abroad (in this case in United Kingdom) for more than three months, showed significantly lower level of food neophobia than those who had been there for a shorter period, indicating exposure to other cultures as another factor of Food Neophobia influence.
Problem Statement

Exerting impact on someone’s choices between national or foreign product, as seen before, we find Ethnocentrism. In parallel, Food Neophobia prevents people from trying new and unfamiliar food, considered like that because the ingredients used in its preparation are unknown and usually come from other countries. The influence of these concepts is measurable through questionnaires that have been widely used and tested on other previously studies and, for the present study, will be treated as Independent and Dependent Variables, respectively.

Past studies (Anic, 2010; Cerjak, Haas, Brunner & Tomie, 2014; Leko-Šimić, 2001; Pecotich, Crnjak-Karanovic & Renko, 2005) revealed a high level of Ethnocentrism and/or precaution regarding the choice of countries from which to buy products that are inexistent in Croatia. Even though this knowledge, none study has been conducted looking to the personal field regarding phobias related to food, searching for people with high levels of Food Neophobia.

Building on previous research (Aqueveque, 2015), the intent of this study is to look for a relationship between Ethnocentrism and Food Neophobia in graduate students attending Zagreb University, thus trying to find a positive relationship between Food Neophobia and Ethnocentric feelings. For that, the following hypotheses were developed:

H₁. The level of Food Neophobia in students is different according to gender

H₂. Students who have lived abroad exhibit low level of Ethnocentrism and Food Neophobia

H₃. Ethnocentrism is positively related to Food Neophobia in students who have lived abroad and in those who have not lived abroad

The results from this paper might be useful to companies when developing marketing strategies to new business in Croatia, where a competitive market has been forming after the
country has joined European Union, and people’s phobias of trying unknown food may embarrass new businesses’ opening. By developing tailor-made strategies focusing on cultural identification managers can reduce their risk when entering Croatian market.

Literature Review

1. Food Choice Process

Having food as one of human beings most essential item in life, to understand what and why they eat is the initial part of this paper. What are the aspects that may influence peoples’ preferences? When a baby, the influence might be the mom, choosing between breast or bottle feeding. Years later the family and social network also influence someone’s choices, as example, what is served on family dinners or what to eat for a fast lunch at work.

As can be seen, the life course, and repeated events that happen during it, have a directly and important impact on the development of food choice. During the life course; through families, networks, new experiences abroad or other social units; the individual develop some food choice patterns influenced by all those factors and the repetition of those patterns create a “…momentum for making the same food selections in future circumstances” (Sobal et al., 2006, p.3).

Those repeated patterns result in habits and food behavior, and from these experienced moments, food preferences are developed. It is important to note that food preferences and taste play an important role in food selection (Birch, 1999).

Taste is one of the most important values on food’s choice, it is related to sensory perceptions and may provide pleasure or aversion on the individual (Sobal et al., 2006; Marina, Marija & Ida, 2014). Preference is the action to choose one item over another and because of that it is implicit “…that liking is the basis for selection” (Birch, 1999, pg. 42). Convenience, Cost,
Health and other values are also present on someone’s choice (Sobal et al., 2006) but they are not high relevant to the continuation of this paper.

2. Food Neophobia

As explained earlier, taste may cause aversion (disgust) on the individual. That feeling may arise from experienced choices or as a protective function. Humans, in a way to protect their lives from the unknown (some kinds of foods may be poisonous, toxic and cause death), decide to take a careful approach to novel foods. This fear or repulsion to unknown food is called Food Neophobia (Pliner & Salvy, 2006). Due to this protective approach, parents’ food choices are determinants on children’s diet. Birch reports in a study, conducted in Sweden by Hursti and Sjodén (1997), and how the high level of Neophobia on parents impacts the diversity of unknown food served to their children (cited in Birch, 1999). Also, on Development of Food Preferences, Birch (1999) explains in details how children’s food preferences developed “…early in life persist to affect adult food selection” (pg. 45).

Food Neophobia is seen as an innate characteristic to some individuals, as explained earlier, but also as a behavior, developed during life course. It is normal to anticipate the unknown to taste unpleasant. A study conducted by Pliner, Pelchat and Grabski (1993) shows how people expect unfamiliar food to taste bad and how their preferences are predicted by those pre-judgments.

The feeling of aversion can arise from experienced moments, as example, nauseas or other problems caused by food; Birch (1999) cites that “once an aversion is formed, the food will be avoided” (p. 54); but in the same way an experience may generate a lesson for disgusting, it can also generate a positive experience and decrease Food Neophobia (Pliner & Salvy, 2006). The gradual exposition to novel food can create positive experiences about taste and help
individuals change their expectations and pre-judgements. Pliner et al. (1993) demonstrated in a study conducted with adult participants how the exposition to good-tasting unfamiliar food led them to choose more unfamiliar food and increased their will to try novel foods.

Considering the explanation about rejection and Food Neophobia, it is necessary to deepen on the subject “unfamiliar food” to further understand the link with the concept of Ethnocentrism. Food can be categorized in five groups, per Tuorila (2001): functional, genetically modified, nutritionally modified, organic and ethnic.

Aqueveque (2015) explained that there are two types of unfamiliar food: those considered unknown because the ingredients are not familiar, and those considered novelty combination, when familiar ingredients are put together in a way never seen/tasted before. Because the ingredients on unknown foods, or sometimes the final product, come from other countries, it is possible to characterize another possible type of rejection: Food Neophobia Ethnocentrism. Arvola, Lahteenmaki and Tuorila (1999) explained that conscious and rational variables can influence on food choice, including self-identity and moral obligation.

3. Social Drivers for Consumer Behavior

As cited before, social factors are part of a wide variety of influences that act on the development of an individual’s food preferences. Families, organizations and communities are examples of units that can exert influence on someone’s choices (Sobal et al., 2006). In these group situations, a social identity is formed among participants in order to achieve a high self-esteem. To do that, people normally make comparisons, judgements, stereotype other groups (called outgroups) and tend to see themselves (and their country, products and culture) in a higher, better position (Brown, 2000).
3.1 Consumer Ethnocentrism

Orth and Firbasová (2003) explain Ethnocentrism as the belief a group tend to have for itself as better but also the need to depreciate the others. This feeling of superiority is extended to political, economic and others levels. It is a relation of pro in-group against outgroup. Consumer Ethnocentrism derives from this concept and captures economic motives for peoples’ preferences between inside (domestic) options rather than outside (foreign) (Zeugner-Roth et al., 2015).

A product’s choice on that environment takes strong emotionally-based attitudes into consideration and, per Orth and Firbasová (2003), “ethnocentric emotions may be strong enough to even overcome rational considerations” (p. 4). An example of that influence may be seen in Renko, Karanarovic and Matic’s (2012) study, where they confirm the hypothesis that Consumer Ethnocentrism is positively related to consumers’ intentions to purchase domestically produced goods and “… Croatian… showed a weak but significant preference towards domestically produced goods” (p. 539).

3.2 National identity

Čorkalo and Kamenov (2003) explained National Identity as the feeling of attachment and belonging that a person develops to his/her nation of origin. It differs from Consumer Ethnocentrism because it does not have a negative relation against outgroups and the feeling of inferiority for the others does not exist.

It is important to understand the difference between Consumer Ethnocentrism and National Identity because the latter one is related to a positive feeling with the nation of origin and due to this positivism there is no fear or resent with out-groups, their products, and thus the fear that purchasing foreign would embarrass their own country’s development does not exist (Zeugner-Roth et al., 2015).
Considering Ethnocentric and Nationalists (high feeling of National Identity) consumers very attached to their home nation thus their products, what can be done to transform “buying foreign” in a pleasant experience? The concept of Country affinity may help with that.

3.3 Feelings towards foreign countries – Country Affinity

As explained by Arvola et al. (1999), consumer’s choices are influenced by conscious and rational variables. On the other hand, Brown (2000) stated that conscious variables related to feelings showed some possibility to be changed. The Consumer Affinity concept arises to connect and explain how it is possible to a consumer strongly attached to “buy domestic” change his/her choices and “buy foreign”. Oberecker, Riefler and Diamantopoulos (2008) explained that as:

A feeling of liking, sympathy, and even attachment toward a specific foreign country that has become an in-group as a result of the consumer's direct personal experience and/or normative exposure and that positively affects the consumer's decision making associated with products and services originating from the affinity country (p. 26)

After the foreign country is part of in-group; and considering that consumers with high level of Ethnocentrism or National Identity prefer to buy domestic/familiar food; its products are also seen as familiar options (Oberecker & Diamantopoulos, 2011) and free of bias.

Also, showing how it is possible to change consumers’ pre-judgements into interest to buy nonlocal products from countries considered as in-group members, a study conducted by Oberecker and Diamantopoulos (2011) with ethnocentric consumers confirmed the hypothesis that “Consumer affinity positively affects consumers’ willingness to buy products originating from the affinity country” (p. 50).
As explained earlier, gradual exposition to novel food can create positive experiences and help individuals change their expectations and pre-judgements. On the same way and trying to exert impact on perceptions, the Consumer Affinity concept states that an individual with high level of Ethnocentrism or National Identity needs exposure to foreign (unknown) country to develop a feeling of liking or attachment (Oberecker et al., 2008).

Some studies have been conducted in Croatia and other Balkans’ countries in order to analyze and try to understand consumer behavior toward domestic and foreign products. All these studies have found a high level of Ethnocentrism or National Identity influencing consumer’s choices. On Dmitrovic et al. (2009), hypothesis related to consumer ethnocentrism influencing more favorably domestic purchase behavior or domestic products were supported.

Other three studies (Anic, 2010; Cerjak et al, 2014; Leko-Šimić, 2001) showed that the choice for domestic products was taken based on product’s quality. Respondents buy domestic products because they perceive their quality as better than foreign or because the products come from trustworthy producers. In Leko-Šimić’s (2001) study, 73% of respondents also believe that purchase foreign products is detrimental to national economy, showing high level of Ethnocentrism.

Another two studies (Ozretic-Dosen, Skare & Krupka, 2007; Pecotich et al., 2005) tried to find the impact of Consumer Affinity on Croatians’ behavior toward domestic and foreign products. In both studies, affinity was found only among countries from the former Yugoslavia or West European Countries. And because these countries are seen as “in-group”, products are accepted and target as having the same high quality as domestic products.

Following section will define methodology, including plan for collecting data, participants and procedure of inquiry.
Methodology

The present study aims to investigate the existence of a relationship between Ethnocentrism and Food Neophobia, thus trying to find a positive relationship between Food Neophobia and Ethnocentric feelings. Based on the literature reviewed, the following hypotheses were developed:

H1. The level of Food Neophobia in students is different according to gender

H2. Students who have lived abroad exhibit low level of Ethnocentrism and Food Neophobia

H3. Ethnocentrism is positively related to Food Neophobia in students who have lived abroad and in those who have not lived abroad

Research design and Instruments

A quantitative approach was chosen for this study and surveys were done as a method for data collection due to time and cost-saving strategies. According to Denscombe (2014), quantitative research analyzes variables; which is the purpose of this paper; whereas a qualitative approach focuses on analyzing the whole panorama. Denscombe (2014) also explains how the data collection in the quantitative approach happens in different moment from the analysis; having the questions been specified prior to the collection; and likewise in this study two questionnaires, Consumer Ethnocentrism Tendency Scale [Cetscale] and FNS, were used for collecting data and analysis were drawn after.

Pliner and Hobden (1992) developed and validated a questionnaire, largely tested on past studies, to measure Food Neophobia in humans. It is known as FNS and consists of questions as ‘I don’t trust new foods’ or ‘I am afraid to eat things I have never had before’; using a five-point
The Likert type of scale (Strongly disagree – Strongly agree), where respondents express their degree of agreement or no agreement for the statements. As explained by Pliner and Salvy (2006), FNS measures reactions related to novel foods, also considered as exotic or foreign cuisines.

As far as the research for other articles using FNS in Croatia was conducted, results showed that it has been largely used in other countries (Barrena and Sanchez, 2013; Barcellos, Aguiar, Ferreira, and Vieira, 2009; Arvola et al., 1999) presenting a high level of reliability with the respective following coefficients Cronbach’s alpha 0.91, 0.79, 0.79, however it is the first time that FNS was applied in this country.

To measure Consumer Ethnocentrism, Shimp & Sharma (1987) developed and validated the Cetscale consisted of 17 questions such as ‘It is not right to purchase foreign products because is detrimental to national economy’ or ‘We should buy from foreign countries only those products that we cannot obtain within our country’. A Likert-type of scale (Strongly disagree – Strongly agree) is used to measure all items and have respondents expressing their degree of agreement or no agreement for the statements. Cetscale has been largely tested and used in other studies through Croatia and other countries (Anic, 2010; Dmitrovic et al., 2009; Renko et al., 2012) showing a high level of reliability, with the respective following coefficients Cronbach’s alpha 0.79, 0.72, 0.96.

For demographics analyzes and to answer both “H1. The level of Food Neophobia in students is different according to gender” and “H2. Students who have lived abroad exhibit low level of Ethnocentrism and Food Neophobia”, an Introduction Questionnaire was created, containing questions as “Gender” and “Have you lived in other country for more than 3 months?”. The full version of all three questionnaires is available at the Appendices part.
The participants

As per Creswell (2013), the purpose of a survey is to generalize from a sample to a population so building on that, the target population and size of sample were drawn. Graduate students from Zagreb University were chosen as population for this study because they represent a panorama of the present but also they may indicate trends for the future: as explained before, the person’s food choice patterns create a “…momentum for making the same food selections in future circumstances” (Sobal et al., 2006, p.3).

The choice for this specific population was made trying to ensure reliability on the instruments used on this paper by following the same steps of previous articles (Anic, 2010; Arvola et al., 1999; Barcellos et al., 2009; Barrena and Sanchez, 2013; Dmitrovic et al., 2009; Renko et al., 2012).

Procedure

To ensure cultural equivalence, translated questionnaires from English to Croatian were required except for the Cetscale that was taken from a local study, Purchase behavior in favor of domestic products in the West Balkans (Dmitrovic et al., 2009), already adapted with 10 questions and having translation and back-translation validated. FNS was translated but showed some inconsistencies during in-person survey. Both questionnaires were first launched on-line to a pilot test group including 350 former students from Zagreb University. Worthwhile mention that none of respondents from the pilot test mentioned problems regarding interpretation.

The on-line survey (initially the pilot test group) was sent through SurveyMonkey to 350 former students from the Business and Management Faculty by a professor from Zagreb University. After two weeks, analyzes were drawn from these 53 answers, comparing with
previous works (Anic, 2010; Arvola et al., 1999; Barcellos et al., 2009; Barrena and Sanchez, 2013; Dmitrovic et al., 2009; Renko et al., 2012), trying to ensure reliability on the instruments by checking obtained means, standard deviations and demographics results.

Considering the results obtained from the pilot test group in line with previous articles cited before, and a very low response rate from participants of the pilot group, a decision to change from the initial idea of on-line surveys to surveys in person was made based on expectations from the author to pursue the given schedule for this study. The data collection then took place at the Business and Management Faculty, during 4 working days, having the same professor from Zagreb University who sent the survey to the pilot test group helping as a mediator and students from different cohorts as population. In Croatian, she introduced myself to her students, citing country of origin, actual university and motives for the research.

While doing the surveys in person, a respondent remarked 2 questions from FNS that did not make sense in Croatian, “Ja sam vrlo posebno o hrani ću jesti” and “Ja ću jesti gotovo ništa”. At the same time the author consulted the professor mediator, who is a native Croatian speaker, who confirmed that those two questions did not have meaning in Croatian. The questions with translation problem were excluded from the already answered questionnaires and not counted for respondents’ Food Neophobia final score, however the remaining questions were used for demographics analyzes.

A new translation was required after the two questions were confirmed to be senseless, having their final version as “Vrlo sam izbirljiv u vezi s hranom koju jedem” and “Pojeo bih bilo što”. The author presented the first version of the questionnaire to other two professors, who are also native Croatian speakers, and they confirmed that the questions did not make sense in Croatian, however the questions could have been understood if the respondents have thought of
it in English. Considering that none of the respondents from the pilot test group had made any objection and only during in-person survey respondents raised the problem with the translation, the author decided to change the questions with a new translation to avoid bias caused by misunderstanding and a new version of FNS was used from that moment on.

In the end, the study received a total of 151 answers for the FNS, being 51 from the first version with two not-correct translated questions and 100 from the second version. The answers from the second-version questionnaire were used to calculate the final score of Food Neophobia used in analyzes for $H_1$ and $H_3$. The remaining 51 questionnaires contemplating the first version together with the 100 questionnaires from the second version were used to draw demographic analyzes.

Cetscale received a total of 159 answers, without any translation problem. More details about the used sample in the Results section.

Sample size

Kline (1994) explains that the minimum of 100 individuals is required as sample size when using Cetscale questionnaire (cited in Jiménez-Guerrero, Gázquez-Abad and Linares-Agüera; 2014), and Nunnally (1978) and Thorndike (1982) recommend a sample ten times greater than the number of items used in the questionnaire (cited in Jiménez-Guerrero, Gázquez-Abad and Linares-Agüera; 2014). In addition, previous studies conducted in Croatia (Anic, 2010; Cerjak et al., 2014; Leko-Šimić, 2001) had the following respective sample size of 213, 31, 202 individuals. The present study has 159 respondents, thereby meets the sample size criteria to support the multidimensionality of Cetscale.
As no special requirement was found regarding sample size for FNS, the present study tried to follow the numbers and characteristics of population used in previous articles (Aqueveque, 2015; Barcellos et al., 2009; Barrena and Sanchez, 2013; Plinner and Hobden, 1992) to support the validity of the instrument, like using undergraduate students as population, with age ranging between 19 and 25 and sample size between 27 and 135 (some studies had 55 and 75 individuals).

Denscombe (2014) explains that smaller-scale surveys contemplate between 30 and 250 individuals, being that accepted if non-probability sampling techniques were used; like quota sampling; producing data that is “sufficiently accurate for the purposes of research” (p. 49). In complement, Hubbard (2014) with his “proportion problem” explains how even a small sample; when nothing is known about a subject; can provide insightful information and probably represents around 75% of the population in study. Based on that, the size and characteristics of the sample used for this study provide basis for comparison to other studies cited before which have employed similar samples and may be considered sufficient for the purposes of this research, however the author understands that size and characteristics of the sample may influence the validity of findings, as explained deeper in the Limitations part.

Data Analysis

The results are organized in 4 sections. The first presents demographics and differences between the two groups used in FNS questionnaires (before and after translation problem); the second section presents the results of FNS and H1 and third section presents the results of Cetscale and H2. Finally, fourth section presents the results for H3 and conclusion.
First Section - Demographics

The sample studied in Croatia consisted mainly of females (70%) with average age of 23 years old. Table 1 presents the results for Cetscale, with a total of 159 respondents.

Table 1

Total Cetscale respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Average Age</th>
<th>Country of origin - Croatia</th>
<th>Lived abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>47</td>
<td>94%</td>
<td>28%</td>
</tr>
<tr>
<td>Female</td>
<td>112</td>
<td>93%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: research data

Table 2 presents the results for FNS that were used only for demographics analysis, contemplating the total number of respondents, including those who have answered the two questions, cited before, without no meaning in Croatian.

Table 2

Total respondents of FNS

<table>
<thead>
<tr>
<th>Gender</th>
<th>Average Age</th>
<th>Country of origin - Croatia</th>
<th>Lived abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>45</td>
<td>93%</td>
<td>27%</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>93%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: research data

Because those two questions are important for calculating the final FNS score, a new group was drawn from the sample showed above, contemplating only answers from the final corrected and translated version. As can be seen in Table 3, the demographics results do not differ greatly from the first group, ensuring that this study uses data with similar characteristics of previous studies (Aqueveque, 2015; Barcellos et al., 2009; Barrena and Sanchez, 2013),
providing basis for comparison and validity of the instrument. This sample is used for analysis on section two to four.

Table 3
Final respondents after translation problem

<table>
<thead>
<tr>
<th>Gender</th>
<th>Average Age</th>
<th>Country of origin - Croatia</th>
<th>Lived abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32</td>
<td>23</td>
<td>91%</td>
</tr>
<tr>
<td>Female</td>
<td>68</td>
<td>22</td>
<td>94%</td>
</tr>
</tbody>
</table>

Source: research data

Second Section – Results from FNS

Table 4 presents the results obtained from the FNS, with respective Means and Standard Deviations. The mean from final score at the end of the table was used as cut-off point, with people below this point called “neophilics” and above this point called “neophobics”. As explained by Pliner and Hobden (1992) food neophobia can be examined as a trait, “a continuum along which people can be located in terms of their stable propensity to approach or avoid novel foods” (p. 107), having in opposite sides the neophilics; or those who seek out for novel foods; and neophobics; those who avoid novel foods.

Table 4
Results from FNS

<table>
<thead>
<tr>
<th>Item</th>
<th>N=100</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am constantly sampling new and different foods *</td>
<td>2,47</td>
<td>0,89</td>
<td></td>
</tr>
<tr>
<td>2. I don’t trust new foods</td>
<td>2,26</td>
<td>0,86</td>
<td></td>
</tr>
<tr>
<td>3. If I don’t know what is in a food, I won’t try it</td>
<td>2,93</td>
<td>1,08</td>
<td></td>
</tr>
<tr>
<td>4. I like foods from different countries and cultures *</td>
<td>2,11</td>
<td>0,80</td>
<td></td>
</tr>
<tr>
<td>5. Ethnic food looks too weird to eat</td>
<td>2,66</td>
<td>0,90</td>
<td></td>
</tr>
<tr>
<td>6. At dinner parties, I will try a new food *</td>
<td>2,14</td>
<td>0,79</td>
<td></td>
</tr>
<tr>
<td>7. I am afraid to eat things I have never had before.</td>
<td>2,26</td>
<td>0,94</td>
<td></td>
</tr>
<tr>
<td>8. I am very particular about the foods I will eat</td>
<td>2,26</td>
<td>0,79</td>
<td></td>
</tr>
<tr>
<td>9. I will eat almost anything *</td>
<td>2,88</td>
<td>0,97</td>
<td></td>
</tr>
<tr>
<td>10. I like to try new ethnic restaurants *</td>
<td>4,16</td>
<td>0,83</td>
<td></td>
</tr>
<tr>
<td>FNS all items</td>
<td>2,61</td>
<td>0,54</td>
<td></td>
</tr>
<tr>
<td>FNS SUM SCORES</td>
<td>25,97</td>
<td>5,51</td>
<td></td>
</tr>
</tbody>
</table>

Source: research data

Items for which scoring is reversed are marked *
Items in Table 4 presented relatively low means (less than 3 for almost all variables), in line with another study conducted in Brazil and United Kingdom (Barcellos et al., 2009). The final scores for neophobia were obtained by adding up the 10-item scores, as described by Pliner and Hobden (1992) with numbers ranging from 14 to 42. The mean for sum scores found for this study is \( m = 25.97 \), also in line with previous studies (Arvola et al., 1999; Barcellos et al., 2009; Barrena and Sanchez, 2013), indicating relatively low level of food neophobia.

The mean for all items using a five-point Likert type of scale (“Strongly disagree – Strongly agree”) found for this study is \( m = 2.61 \) and have all the results from men and women shown on the graphic below. As can be seen the distribution of values shapes a normal curve which, according to Pyrczak (2010), is of great importance when the numbers are used as basis for inferential statistics.

Graphic 1

FNS distribution curve

The sample was then separated and the mean found for men and women, respectively, was \( m = 2.69 \) and \( m = 2.57 \). Furthermore, to answer the proposed hypothesis “\( H_1 \). The level of Food Neophobia in students is different according to gender”, a t-test for independent data was run to assert if the observed difference between those means was due to sampling errors.
Although the observed difference results showed that the difference between means is not statistically significant \( t = 1.02, \text{df} = 60, \ p > .05 \), therefore \( H_1 \) was rejected. This finding is in line with other studies where no difference was found in the level of neophobia regarding gender (Arvola et al., 1999; Pliner and Hobden, 1992).

Third Section - Results from Cetscale

Based on findings from Dmitrovic et al. (2009) and Johns et al. (2011), where lower levels of Ethnocentrism and Food Neophobia respectively were found in students who have lived abroad, the following hypothesis was developed:

\[ H_2: \text{Students who have lived abroad exhibit low level of Ethnocentrism and Food Neophobia} \]

Graphic 2 shows the distribution for the Cetscale sum scores found for this study. As explained before, because the distribution of values shapes a normal curve, the numbers were used as basis for inferential statistics (Pyrczak, 2010).

Graphic 2

Cetscale distribution curve

Source: research data
Respondents showed discrete difference on means between those who have lived abroad and those who have not. From a total of 259 respondents 49 lived abroad for more than three months, and from this group 29 scored low in both Cetscale and FNS, representing 59% of the sample. Table 5 presents the descriptive results.

Table 5
Results from Cetscale and FNS

<table>
<thead>
<tr>
<th></th>
<th>SumScore</th>
<th>Mean</th>
<th>Lived Abroad?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>CETSCALE</td>
<td>25,93</td>
<td>24,61</td>
<td>26,21</td>
</tr>
<tr>
<td>FNS</td>
<td>25,97</td>
<td>24,52</td>
<td>26,35</td>
</tr>
</tbody>
</table>

Source: research data

In answering the hypothesis H2 and to check the observed difference between means a t-test for independent data was run. Despite the observed representativeness of 59% of the sample who have lived abroad have also showed lower scores in both Cetscale and FNS, t-test results proved that the difference between the means is not statistically significant (t = -1.68, df = 67, p>.05), therefore H2 was rejected. This result felt below the expectations of the author as, based on previous studies (Dmitrovic et al., 2009; Johns, Edwards and Hartwell, 2011; Parts and Vida, 2011), culturally open individuals tend to show less ethnocentric or neophobic tendencies.

Fourth Section – Ethnocentrism x Food Neophobia

In the context of being a relatively new EU member country facing social and political transformations associated with economic integration, and having seen Foreign Direct Investments (FDIs) expressively fall in the end of 2015 (Trading economics, 2017), a relative high level of Ethnocentric feelings may play an important role in preference formation for domestic vs imported products. This can be confirmed with the results of some specific questions.
from Cetscale, showed on Table 6 and in line with previous studies (Anic, 2010; Cerjak et al., 2014; Leko-Šimić, 2001).

Table 6

Questions regarding Ethnocentric feelings

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only those products that are unavailable in Croatia should be imported</td>
<td>3.08</td>
</tr>
<tr>
<td>It is always best to purchase products made in Croatia</td>
<td>3.42</td>
</tr>
<tr>
<td>It may cost me more in the long run, but I prefer to support Croatian products</td>
<td>3.28</td>
</tr>
<tr>
<td>Cetscale mean (all questions)</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: research data

As explained earlier and confirmed through results showed on Table 6 ethnocentric customers believe that buying foreign-made products is detrimental to domestic economy. Since Food Neophobia is the fear of unknown food (Pliner and Salvy, 2006), and as per Aqueveque (2015) food can be characterized as “unknown” because the ingredients are not familiar and come from other countries, building on previous study (Aqueveque, 2015), H3 was developed trying to find a positive relation between Ethnocentrism and Food Neophobia.

Looking back on results from FNS, with scores ranging from 14 to 42 and the mean found for this study as $m = 25.97$, a moderate level of food neophobia may be assign to this sample. Using the final sample of 100 respondents from FNS (previous explanation on Table 3), and checking the result on Cetscale for the same respondents, the Table 7 was created. It shows that 53 respondents scored above the mean on Cetscale and 50 on FNS. From those 28 had scores above the mean on both questionnaires, representing a total of 28% (from a sample of $N = 100$).
To check if there was a statistical relationship between these two variables, and in answering H3. “Ethnocentrism is positively related to Food Neophobia in students who have lived abroad and in those who have not lived abroad”, a Pearson test was run. Results showed a weak and positively related correlation ($r = .28, r^2 = .08$), therefore the findings partially (percent explained variance = 8%) confirm H3. The result differs from findings on Aqueveque’s (2015) study where a stronger and direct correlation was found ($r = .75$), thus further research is necessary to confirm stronger correlation results. Graphic 3 illustrates the weak, direct relationship found between the variables.

Graphic 3

Ethnocentrism x Food Neophobia correlation
Limitations

Worthwhile mention situations that may have caused impact on results of this study. First, the questionnaires used on this research had an explanation on the header about the use of students’ personal data and the probability of being called for a future experiment. Fearing being invited to participate in some experiment that might involve food students may have projected their feelings toward new foods, through FNS, in a more lenient way.

Associated to the fear of an experiment, the fact that the professor presented the author to the students as coming from Brazil the concept of Consumer Affinity (explained before) may have played an important role on students’ answers. As Oberecker et al. (2008) explained, exposure to products from an unknown country may help develop feeling of liking and this feeling of affinity with Brazil may have been expressed through the questionnaires (Croats are very enthusiasts with Brazil because of the first game played between the two countries during the opening of World Cup in 2014 and many soap operas played in Croatian TV channels).

Finally, by focusing on a population consisted only of graduate students from the Business and Management Faculty it is not possible to generalize the findings to the Croatian population in general.

Conclusions and Recommendations

Ethnocentrism and Food Neophobia have been part of peoples’ choice between national; or familiar food; and foreign; or unfamiliar/unknown food as seen on Literature Review. In a search for a better understanding of how this concepts are present in graduate students in Croatia and more important if they are related to each other, three hypotheses were drawn. Based on findings presented previously it is assured to say that Neophobia does not present itself in
different levels regarding gender. Even with some articles presenting similar results (Arvola et al., 1999; Pliner and Hobden, 1992), was heartening to see the hypothesis being rejected and to find the results in line with others specially being this the first time FNS was used in Croatia.

This shows in respect of Food Neophobia attributed to gender that foreign companies when entering the Croatian market for the first time should expose their products to consumers of both genders equally since no difference in phobia level was found between them. In regards of Country Affinity, companies may deploy this concept in a way to develop a feeling of liking and make their products/services easier to be accepted. All those factors are important when designing marketing strategies towards customers with Food Neophobia. Further research on the level of Food Neophobia among elderly and youngers would be useful for companies to establish a different approach to these customers.

Another hypothesis was developed regarding the effect of experienced live abroad and lower levels of Ethnocentrism and Food Neophobia. Although previous studies (Dmitrovic et al., 2009; Johns et al., 2011; Parts and Vida, 2011) showed that culturally open individuals tend to show less ethnocentric or neophobic tendencies findings indicate that in the case of Croatians this exposure does not reduce consumer prejudice towards foreign countries and their respective products. Considering that students who answered those questionnaires had, in their majority, lived abroad in countries who were part of former Yugoslavia and Germany, it is possible to infer based on similar characteristics of food and common history that results could have been different if the country where they moved to had no similarities with their homeland.

Results are of importance to companies when developing marketing strategies to new business in Croatia and points to be highlighted in campaigns are country of origin and
similarities of products with Croatian market. To further investigate if the results were impacted by affinity between countries future studies should include variables to control the effect of foreign countries affinity on the country of study.

In answering the central hypothesis of this study, if Ethnocentrism is positively related to Food Neophobia, findings revealed a weak correlation. Some aspects as discussed on the Limitations part may have influenced students’ answers, showing a lower level of Food Neophobia and Ethnocentrism in graduate students in Zagreb therefore a weak correlation between those concepts. However, taking into consideration the fact that Croatia after joined EU is opening its doors to new business, foreign capital and bringing some worldliness to its citizens it is possible to infer that the new generation has being raised within concepts of open-mind and to accept cultural differences and to discover more about the unfamiliar/unknown.

A combination of knowledge about Food Neophobia and Ethnocentrism levels presented in this sample it is of much importance when designing communication campaigns and in providing to customers a sense of emotional affinity and social belonging. Further research is necessary on the correlation between those concepts and also a replication with a non-student sample is desirable to ensure generalization of the results to the population.

The costs of researching and developing market knowledge are high however when understanding that factors like life history, experiences, personalities and phobias may influence customers’ choice (Sobal et al., 2006), managers can reduce their risk when entering Croatian market by developing tailor-made strategies focusing on cultural identification and emotional boost. And by investigating the relationship between those factors it is hoped that this research offers some guidance in this respect.
References


Appendices

Questionnaire 1

Introduction and demographics information

Ovo istraživanje je dio mog magistarskog rada, a sastoji se od dva dijela: prvi uključuje pitanja, a drugi dio se odnosi na eksperiment (zato Vas molim email ili broj telefona). Sve informacije se koriste isključivo za znanstveno istraživanje, a sigurnost i povjerljivost Vam je zajamčena.

Adresa e-pošte: ___________________________/Telefonski broj: ___________________________

Dob: ___________________________/ Rod: Ženski ☐ Muški ☐

Zemlja Rođenja: ___________________________/Zemlja u kojoj živite: ___________________________

Jeste li živjeli u drugim zemljama više od 3 mjeseca? Da ☐ Ne ☐

Questionnaire 2

Consumer Ethnocentrism Tendency Scale

1. Uvoziti bi trebalo samo one proizvode koji su nedostupni u Hrvatskoj.

   UOPĆE SE NE SLAŽEM   NE SLAŽEM SE   NITI SE SLAŽEM NITI SE NE SLAŽEM   SLAŽEM SE   U POTPUNOSTI SE SLAŽEM

2. Uvijek i prije svega hrvatski proizvodi

   UOPĆE SE NE SLAŽEM   NE SLAŽEM SE   NITI SE SLAŽEM NITI SE NE SLAŽEM   SLAŽEM SE   U POTPUNOSTI SE SLAŽEM

3. Kupovanje proizvoda koji su stranog porijekla nije domoljubno

   UOPĆE SE NE SLAŽEM   NE SLAŽEM SE   NITI SE SLAŽEM NITI SE NE SLAŽEM   SLAŽEM SE   U POTPUNOSTI SE SLAŽEM

4. Kupovati strane proizvode nije uredu

   UOPĆE SE NE SLAŽEM   NE SLAŽEM SE   NITI SE SLAŽEM NITI SE NE SLAŽEM   SLAŽEM SE   U POTPUNOSTI SE SLAŽEM

5. Pravi državljanin Hrvatske trebao bi uvijek kupiti hrvatski proizvod

   UOPĆE SE NE SLAŽEM   NE SLAŽEM SE   NITI SE SLAŽEM NITI SE NE SLAŽEM   SLAŽEM SE   U POTPUNOSTI SE SLAŽEM
6. Trebali bi kupovati proizvode proizvedene u Hrvatskoj umjesto pomagati drugim zemljama da se obogate na naš račun.

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<tr>
<th>UOPĆE SE NE SLAŽEM</th>
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7. Najbolje je uvijek kupovati proizvode hrvatskog porijekla

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8. Hrvatski državljanim ne bi trebao kupiti strane proizvode jer time vrijeda domaće gospodarstvo i uzrokuje nezaposlenost

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9. Dugoročno, može me koštati više, ali unatoč tome više volim podržavati hrvatske proizvode

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10. Hrvatski potrošači koji kupuju proizvode proizvedene u drugim zemljama, odgovorni su što njihovi sugrađani ostaju bez posla

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<th>UOPĆE SE NE SLAŽEM</th>
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Questionnaire 3

Food Neophobia Scale

11. Stalno probam nove i različite hrane.

<table>
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<th>UOPĆE SE NE SLAŽEM</th>
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13. Ako ne znam što je u hrani, neću probati.

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<th>UOPĆE SE NE SLAŽEM</th>
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14. Volim hranu iz različitih zemalja i kultura.

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<th>UOPĆE SE NE SLAŽEM</th>
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15. Hrana iz različitih kultura i zemalja izgleda čudno (ili neobično) za jesti.

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<th>UOPĆE SE NE SLAŽEM</th>
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17. Bojim se jesti hranu nikada nisam probao prije.

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<th>UOPĆE SE NE SLAŽEM</th>
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18. Vrlo sam izbirljiv u vezi s hranom koju jedem.

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19. Pojeo bih bilo što

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20. Volim ide na mjesta koja služe hranu iz različitih kultura i zemalja.

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