# THE INFLUENCE OF CULTURAL SIMILARITY ON HOME COUNTRY BIAS

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## Abstract

Consumers tend to display home country bias, meaning they perceive products from their home country more positively than foreign alternatives. Research has identified two individual difference variables, consumer ethnocentrism and national identification, that are positively correlated with the amount of home country bias shown. Little is known, however, concerning whether the amount of home country bias shown is affected by how the foreign country in question is perceived. Matters such as cultural similarity between the home country and foreign country could perhaps influence how the foreign product is evaluated, and subsequently affect home country bias. The current research sets out to explore whether cultural similarity moderates the relationship between on the one side national identification and consumer ethnocentrism and on the other side product evaluations and preference. An online study (N = 169) with Dutch participants was conducted in which evaluation of and preference strength for tomatoes from Dutch, French, Spanish and Moroccan origin were measured. Contrary to what was hypothesized, high national identifiers were not shown to be affected by cultural similarity, although an interesting tendency was seen in which high identifiers showed a positive bias towards culturally similar and dissimilar countries, whereas this was not seen for moderately similar countries (pointing towards a curvilinear relationship between cultural similarity and out-group bias for national identification). Moreover, there is evidence that ethnocentric consumers show more negative bias the lower the cultural similarity, thereby pointing towards a negative linear relationship between cultural similarity and out-group bias for consumer ethnocentrism. These findings are not only important in understanding the several components of and contributors to home country bias, but it also adds to current research on general intergroup similarity and intergroup bias. Additionally, the findings give insights on how to market domestic and foreign products to nationalistic and ethnocentric consumers.

**Key concepts**: *home country bias; country-of-origin effect; national identification; consumer ethnocentrism; intergroup bias; cultural similarity; intergroup similarity.*

**Preface**

The sheer fact that you are currently reading this preface marks the end of my thesis journey. During a six-month long period, I have dived into the depths of consumer behaviour, country-of-origin effects and nationalistic tendencies. I have entered into combat with concepts such as bias, intergroup similarity and group identification, which on the surface seemed simple, yet revealed to be much more complex. I have tested not only my patience with data analysis programs, but also that of my supervisor and of everyone in the MCB corridor, who mistakenly left their door open for me to barge in with my struggles (for which I simultaneously extend my apologies and my thanks). But it was a process that I enjoyed immensely and I am proud of its product, which is this thesis report.

Coming from a History and Political Science background, I knew from the onset I wanted to focus my research on the relationship between identity and consumption. In my previous studies, I focused on ontological security, or the way bodies attempt to secure a stable sense of identity through routines. Where this previously led to research on how nations defined their place in the world order through foreign policy doctrines, I was eager to apply this idea to consumption habits as well. I am fascinated by the two-way interaction between identity and consumption, in which we use consumerism to express ourselves, whilst at the same time the way we consume also defines us. As the French gastronome Jean Anthelme Brillat-Savarin said in 1825: "Tell me what you eat and I shall tell you what you are" (as cited in Pietrykowksi, 2004, p. 307).

My interest in the origin of products was sparked during my time in Wageningen. Having followed lectures on *terroir*, place-making and local products, I learned that we as consumers obtain information about a product based on the place where this product was produced. In other words, the origin of a product is a way to make meaning of the product, and through consumption, a way to make meaning of oneself. This is especially the case when this origin corresponds with your own origin. For example, I feel extra Dutch whenever I am eating bread with Gouda cheese and Zaanse mustard (something I, perhaps not coincidentally, also crave whenever I'm homesick abroad). Thus, if I may be as free as to change Brillat-Savarin's words: "Tell me what you eat and I shall tell you where you are from" (Shen, 2020).

I want to express a word of thanks to my supervisor, prof. dr. Hans van Trijp. Your enthusiastic supervision motivated me to develop myself further as a researcher. Coming from an academic tradition where every sentence needed to be traced back to another source or another authority, your encouragement gave me the confidence to develop my own ideas and "to be prepared to defend it with a straight back". I also want to thank my fellow thesis writers: without your company and laughter, my thesis would have been finished months ago.

Julia

## 1. Introduction

What we eat every day is central to our identity, a notion which is nicely captured by the common adage "*you are what you eat*". According to Fischler (1988), our food consumption, next to the fact that it nurtures and sustains us physically, gives meaning to our sense of self. As he states: "Food makes the eater: it is therefore natural that the eater should try to make himself by eating" (p. 280). By making certain food choices, human beings assert their sense of self and distinguish themselves from others. Our consumption can thus be categorized as a complex relational activity (Pietrykowski, 2004). Our membership of a group or a culture, for example, can be expressed through our food choices. Similarly, it lays bare our differences with other groups. The importance of food for cultural identity becomes clear in observations of migrants and their descendants, who retain home country food customs, long after other things such as language have been forgotten (Fischler, 1988). Food is therefore an important component of our sense of collective belonging.

Increasing globalization and industrialization, however, has led to a kink in the connection between food and identity. The expansion of the agri-food industry has led to anonymous, identity-less food products. Mono-cropping, standardization of production processes and international sourcing of ingredients and products have all had their share in creating so-called 'footloose' food supply chains and 'placeless' food products (Pietrykowski, 2004). More and more consumers have become 'pure' consumers, meaning that they have no connection to the origin and production of the food they consume. However, if we cannot identify what we eat, then how can we use it to identify ourselves? Consequently, this feeling of detachment has induced movements of reaction (Fischler, 1988).

For example, there has been a heightened interest of consumers in the origin of their food products in order to bridge this distance between production and consumption (Pietrykowksi, 2004). As noted by Levy (1996), knowing where a product was produced provides said product with an identity or meaning. This increased interest of consumers in the origin of their foods, as a consequence of growing globalization, can also be seen in increased scientific awareness of and interest in the effects of Country-of-Origin (COO) of products on consumer evaluations and preferences (Fischer & Zeugner-Roth, 2016). Schooler (1965, as cited by Verlegh, 2001) was the first to prove the effect of country of origin on consumer behaviour, as he found significant differences in product evaluation between products that

were in all aspects identical, except for country of origin. Over the past decades, this effect has been studied in-depth (for an extensive review and meta-analysis of COO research, see Verlegh, 1999).

Focussing on the origin of our food is then also a way to declare our membership of a certain group. One branch of COO research has studied the home country bias, referring to the tendency of consumers both to evaluate domestic products more positively than foreign products and to show an increased willingness to buy domestic (Verlegh, 2001). Another consequence of globalization, the heightened interest in 'buying domestic' could be considered a reaction to the fading national borders and identities in this increasingly borderless world. Whether or not this is the case, 'buying domestic' rhetoric has been oft used in nationalistic campaigns in the last years. For example, Donald Trump's plans for "rebuilding America" as announced during his election campaign consisted of two core principles: "buy American and hire American" (White House, 2017).

According to Verlegh (2001), home country bias in consumers is influenced by two related, yet different individual difference variables: national identification, which is the extent to which an individual identifies with their own nation, and consumer ethnocentrism, a more economic belief concerning the appropriateness of buying a foreign product. Research has shown high levels of national identification and consumer ethnocentrism can persuade consumers to buy domestic, even when they know the foreign product to be of better quality (Verlegh, 2011; Fischer & Zeugner-Roth, 2016).

However, little is known about the extent to which these two individual difference variables can influence product evaluation and subsequent preference. Verlegh (2001) noted that perhaps the choice of foreign countries in his study affected consumers' willingness or aversion to buy foreign products. This notion suggests that the extent to which consumers favour their own country over other countries not only depends on their own level of national identification and consumer ethnocentrism, but also on how they perceive the other country when making the foreign product evaluation. Previous research, for example, has shown that when deciding between products of two foreign countries, a consumer is more likely to choose a product from a culturally similar country (Ma, Wang & Hao, 2012). Little is known, however, what the effect of cultural similarity is when choosing between a product from a foreign country and the home country. The current research therefore attempts to contribute to existing literature on home country bias, by shedding light on what happens to home

country bias when consumers are presented with products from foreign countries that vary in cultural similarity. It proposes a new framework in which cultural similarity moderates the relationship between on the one side national identification and consumer ethnocentrism and on the other side foreign product evaluation, thereby influencing the amount of home country bias shown.

Research on home country bias and the perception of other countries' products is relevant to understand the aforementioned trend of nationalism through consumerism. It is important to understand how consumers' affiliation with their national group affects their consumer decisions in a globalized world, where some nations are perceived as closer or more similar than others. Moreover, through an analysis of the effect of similarity between groups on how group members evaluate other groups, the current research adds to general literature on intergroup similarity and intergroup differentiation. Lastly, the findings are of relevance for marketing implementations, as it gives insights on whether or not to highlight a foreign country's similarity to the consumer's home country when marketing foreign products.

The current paper is structured as follows: first a theoretical background is given on the two individual difference variables that precede home country bias, national identification and consumer ethnocentrism. Placed in the theoretical context of social psychology, more light is shed on how these variables are influenced by intergroup comparisons. Next, a discussion of cultural similarity and the effect it can have on foreign product evaluation follows, introducing an explorative model portraying the relationship between cultural similarity and outgroup evaluation. Following the theoretical background, a conceptual model is introduced that tests the influence of cultural similarity on the relationship between the antecedents of home country bias, being levels of national identification and consumer ethnocentrism, and the products of home country bias, being product evaluations and subsequent product preference. To test this model, a study is conducted on the product evaluations of Dutch consumers concerning tomatoes from four different countries, one from the Netherlands and three from countries with varying levels of cultural similarity. The paper concludes with a discussion of the results of this study, the theoretical and managerial contribution of the study and suggestions for future research.

## 2. Theoretical Background

Home country bias can be interpreted as an expression of intergroup bias, which is defined as the process of differentiating the in-group positively from the out-group on a relevant dimension (Hewstone, Rubis & Willis, 2002). This can be done through overvaluing the in-group and/or through devaluing the out-group (Hewstone et al., 2002; Jetten, Spears & Manstead, 1999). In the case of home country bias, the relevant dimension of comparison is then product evaluation and preference. Consequently, in order to understand how the domestic product is perceived in the context of foreign alternatives, both domestic and foreign product evaluation and preference need to be taken into account. Research on the home country bias has identified two individual difference variables that have an impact on the biased evaluation of products and the increased willingness to buy domestic compared to foreign: the level of national identification and the level of consumer ethnocentrism. Both concepts can be better understood in the context of Social Identity theory, a theory put forward in the last half of the previous century and which soon became one of social psychology's most pre-eminent theoretical perspectives (Brown, 2000). Social Identity theory concerns group memberships and how they influence an individual's identity. Most of the research on Social Identity theory concerns how groups operate in the context of other groups, thereby making it relevant for understanding intergroup bias. The following section will therefore give a short overview of Social Identity theory, the theoretical background it provides for national identification and consumer ethnocentrism, and the conceptual differences between the two. Moreover, the potential influence of cultural similarity between groups on intergroup comparison is discussed, in order to understand how this variable could influence foreign product evaluations, and thereby home country bias.

### 2.1. Social Identity Theory

Intergroup bias, which thus includes home country bias as well, is best explained by Social Identity theory, a school of thought that examines the psychological consequences of being part of a group. According to Tajfel (1978), being a member of a group creates a social identity, which is "that part of an individual's self-concept which derives from his [sic] knowledge of his membership in a social group […] together with the value and emotional significance attached to that membership" (p.63). Based on the assumption that people want to have a positive self-

image, this concurrently results in a motivation to create a positive social identity as well, "expressed through a desire to create, maintain or enhance the positively valued distinctiveness of in-groups compared to out-groups on relevant dimensions" (Turner, 1999, p. 8). In other words, thinking positively about one's group, enhances one's self-esteem. This then motivates the individual to support their group and uphold their group image.

One way a positive social identity can be secured is by making favourable comparisons with relevant out-groups. This would explain the occurrence of positive in-group bias, even in the absence of conflicts or other objective causes (Brown, 2000). Important to note, however, is that positive in-group bias does not necessarily imply the manifestation of negative out-group bias as well. In fact, studies demonstrate a bias asymmetry in which an overestimation of the in-group is more likely to occur than a negative evaluation of a foreign product. As Crocker, Thompson, McGraw and Ingerman (1987, p. 915) noted, "in-group bias is largely a function of in-group enhancement rather than out-group derogation". According to Brewer (1979), this asymmetry in product evaluation could be caused by said evaluation lacking the context of a zero-sum game, meaning that the situation is not competitive enough to warrant an active, negative treatment of the out-group. More attention should therefore be paid to the relationship between the home country and the foreign country when examining product evaluations in home bias research (Verlegh, 2001).


2.2. National Identification
The jump from intergroup bias to home country bias is not a large one, as Tajfel (1978), one of the founding fathers of the Social Identity theory, based his definition of social groups, being a body of people who perceive themselves as a group, on a definition of a nation. Sociologist Giddens also remarked that a nation's inhabitants have "an overall awareness […] of belonging to an inclusive community with a certain identity" (1981, pp. 45-46). Thus, a nation can be considered a social group, and individuals belonging to that nation can display a certain motivation to view their nation in a favourable light.

National identification as an individual difference variable then refers to the extent to which an individual identifies with the nation. According to Social Identity theory, identification with a group means that the group has become part of the self. However, the extent to which this happens differs per individual. Irrespective of whether these varying

levels of identification are caused by individual differences in the need to belong or by the specific dynamic in the group, they are likely to lead to differences in the strength of in-group bias (Verlegh, 2001). A meta-analysis by Brown (2000) showed that the more one identifies with a group, the more likely it is that positive in-group bias will be displayed. Since home country bias is considered a manifestation of intergroup bias, one would assume that national identification also has an impact on home country bias. Research on the influence of national identification on product evaluation has indeed shown that this is the case: consumers with high levels of national identification evaluate domestic products more positively and demonstrate a higher willingness to buy domestic (Verlegh, 2001; Fischer & Zeugner-Roth, 2016). Concerning foreign product evaluation, however, Verlegh (2007) has shown that the level of national identification is not significantly related to out-group devaluation. This demonstrates the aforementioned bias asymmetry: in-group favouritism is stronger than out-group derogation. Still, the overall difference between domestic and foreign product evaluations has been found to mediate the positive effect of national identification on willingness to buy domestic.

## 2.3. Consumer Ethnocentrism

Another contributor to home country bias in product evaluations is consumer ethnocentrism, a concept put forward by Shimp and Sharma (1987). Consumer ethnocentrism entails the extent to which an individual is influenced by the normative belief that buying foreign products is inappropriate or immoral due to the effect this might have on the domestic economy and labour force. This normative belief then positively influences the evaluation of domestic products and subsequently the willingness to buy domestic, similar to national identification. Although related and linked, consumer ethnocentrism and national identification differ in nature. Whereas national identification covers the extent to which someone identifies with a group, in this case their nation, consumer ethnocentrism concerns more the extent to which one feels the need to protect that group via consumerism. In fact, national identification has been shown to be one of the antecedents of consumer ethnocentrism, as the need to protect the economy by buying domestic products requires that consumers attach a certain significance to their nationality (Verlegh, 2001).

Whereas national identification was seen not to affect out-group evaluation, consumer ethnocentrism has been shown to negatively impact evaluation of foreign products (Verlegh, 2007; Klein, Ettenson & Morris, 1998). The aforementioned bias asymmetry hence does not appear in ethnocentric consumers: next to a more positive evaluation of the domestic product, consumer ethnocentrism also leads to a more negative evaluation of the foreign product, compared to non-ethnocentric consumers. The definition of ethnocentrism in general might be able to explain this difference with national identification: ethnocentrism is defined as "the view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it" (Sumner, 1906, as quoted in Sharma, Shimp & Shin, 1994, p. 27). As a consequence of this perspective, ethnocentric people tend to view their in-group as superior, whereas the out-group is perceived as inferior (Sharma et al., 1994). Moreover, ethnocentric people see the in-group as offering protection against apparent threats from out-groups (Klein et al., 1998). Hence, this might go a step further than needing to boost one's self-esteem by evaluating oneself or one's group more positively, which was how Social Identity theory explains in-group bias and what construes the influence of national identification on home country bias. Ethnocentrism entails the negative evaluation of the out-group in order to establish the superiority of the own group. An ethnocentric consumer, therefore, will negatively evaluate foreign products as these constitute competition for domestic products and thereby a threat to the domestic economy (Sharma et al., 1994).

## 2.4. Cultural Similarity

As shown in this literature review, national identification and consumer ethnocentrism could influence domestic product evaluations and preference. However, different from consumer ethnocentrism, national identification was not shown to be influencing outgroup evaluation. According to Brewer (1979) and Hewstone et al. (2002), nationalistic people only show outgroup bias in specific situations, for example if the outgroup is perceived as a threat. In order to understand the limits of home country bias, it is therefore interesting to examine how the position of the out-group, in this case the foreign country, could influence the evaluation process. For example, if the foreign country is perceived less favourably, this might increase the threat perceived, thereby increasing the occurrence of home country bias. One factor that could influence how the foreign country is perceived is the level of cultural

similarity between the in-group and out-group. Cultural similarity concerns the overlap between groups in history, language, religion, expressions, values, grievances and aspirations (Ma et al., 2012).

### 2.4.1. Cultural Similarity and Consumer Ethnocentrism

Interestingly, cultural similarity research on product evaluations has shown that increased cultural similarity is seen to weaken the effects of consumer ethnocentrism in product evaluations (Ma et al., 2012). However, this research only examined the effects of cultural similarity by comparing product evaluations of two foreign countries, and therefore did not concern home country bias. Since the current research is focused on product evaluations that concern a comparison between a product from a foreign country and the home country, this weakening effect of cultural similarity on consumer ethnocentrism is assumed to vanish. As mentioned before, when it concerns the decision between purchasing a foreign product or a domestic product, an ethnocentric consumer believes it is inappropriate or even immoral to buy foreign in general, and it is therefore unlikely that the level of cultural similarity would influence this.

### 2.4.2. Cultural Similarity and National Identification

Since matters such as history, language and religion influence national identity as well, it is more likely that cultural similarity does have some influence on the extent national identification influences home country bias (Ma et al., 2012). Since research on the effect of cultural similarity on intergroup comparison is limited, it is necessary to have a look at research on general intergroup similarity, group identification, and intergroup bias.

Since those who identify strongly with their in-group attach more weight to the group, they are also more likely to be more aware of group delineations (and thus how similar another group is to their in-group) and more motivated to maintain and protect the existence of their in-group. As shown before, this is demonstrated by the fact that high identifiers are more likely to display positive in-group bias. This would then suggest that high identifiers are also more susceptible to how an out-group could threaten the positive identity of the in-group, for example through the level of similarity between the out-group and in-group.

Indeed, research has shown that high identifiers are more influenced by the level of intergroup similarity than low identifiers in displaying intergroup bias (Jetten, Spears & Manstead, 2001).

Research on intergroup similarity, however, is unclear about the direction of this influence of similarity on intergroup bias. On the one hand, there is a large body of research that focuses on the hypothesis that increased similarity will lead to increased intergroup bias. This hypothesis, dubbed by Jetten, Spears and Postmes (2004) as the 'reactive differentiation hypothesis', finds its theoretical backing by the previously discussed Social Identity theory. According to Brown (2000), Social Identity theory is in essence a theory of group differentiation: it concerns how groups create an identity by making the in-group more distinctive, and wherever possible, better than out-groups. This would imply that when the out-group is perceived as more similar, this is seen as a threat to the in-group distinctiveness, which would lead to more in-group bias. Indeed, this has been demonstrated in multiple studies (e.g. Brown & Abrams, 1986; Roccas & Schwartz, 1993).

However, although there is widespread acceptance of the validity of this hypothesis, empirical support has been equivocal, as studies have also shown that increased similarity leads to less intergroup bias (e.g. Brewer & Campbell, 1976; Brown, 1984; Brown & Abrams, 1986). Theoretical support for the opposite of reactive differentiation is given by Self-Categorization theory, proposed by Turner, Hogg, Oakes, Reicher and Wetherell (1987). According to this theory, our sense of self is influenced by the saliency of the range of social groups with which we compare ourselves. We tend to categorize ourselves and others so as to create a maximum distance between the categories and a minimum distance within categories (Turner & Onorato, 1999). Research has found that intergroup salience, thus the ease with which one can distinguish another group from one's own group, is actually related to increased levels of in-group bias (Jetten, Spears & Manstead, 1998). Since a dissimilar out-group displays more differences with the in-group, intergroup salience increases when faced with a dissimilar group. This hypothesis, named the 'reflective differentiation hypothesis', thus suggests that dissimilarity leads to more intergroup bias.

The tension between these two theoretical perspectives is ironic, as Self-Categorization theory actually stems from Social Identity theory (Turner et al., 1987). However, this lineage between the theories suggests that perhaps the two hypotheses, reactive differentiation and reflective differentiation, do not need to be mutually exclusive. Possibly, a theoretical integration is possible, whereby the two hypotheses are placed on both

ends of a spectrum. Indeed, Jetten et al. (1998) argue that the two theoretical perspectives can be integrated into a model that displays a curvilinear relationship between intergroup similarity and intergroup differentiation, meaning that positive in-group bias is highest when a group is moderately similar. With moderately similar groups, they argue, the level of distinctiveness is high enough to make intergroup comparison possible, yet not so low as to undermine intergroup distinction. In their words: "a certain degree of distinctiveness may be necessary for the groups to qualify as independent groups, rather than elements of some superordinate category. However, the groups must be sufficiently similar on contextually relevant dimensions to be socially comparable and to potentially challenge the distinctiveness of the in-group" (1998, p. 1482). Indeed, multiple studies conducted by Jetten et al. (1998) show that when participants perceive the out-group to be moderately similar, positive differentiation for the in-group is highest.

Whilst the current study agrees with the notion that there needs to be a relevant dimension of comparison in order to accurately measure intergroup differentiation, it argues that Jetten et al. (1998) did not actually include this in their study design. Their experiments, both including experimental and natural groups, measured perceived similarity on irrelevant dimensions, such as level of belief in supernatural phenomena between groups of students from different universities. Furthermore, it then showed mock results of the group distance and variability to induce perceptions of (dis)similarity, thereby varying the results from the same out-group to create three conditions with different levels of intergroup similarity. Thus, not only was the concept of intergroup similarity simulated, even in natural group settings, the dimension of comparison was not one that was relevant for the type of groups, and might therefore have not evoked accurate in- and out-group evaluations. Furthermore, the studies mentioned here (Jetten et al., 1997; Jetten et al., 1998; Jetten et al., 1999; Jetten et al., 2001; Jetten et al., 2004) focused more on the effect of intergroup similarity on in-group bias, this being the effect it has on in-group evaluation. However, the current study used a natural group setting with one condition, in which three out-groups differ in levels of intergroup similarity. Thus, instead of measuring in-group evaluation three times, the focus now lies on the differences in out-group evaluations. The results from these studies are therefore not of use for the current study.

However, a theoretical integration of Social Identity theory and Self-Categorization theory might still be possible, yet not with the conclusions drawn by Jetten et al. (1998). In

fact, based on the two theories, one would assume that similar and dissimilar out-groups both trigger out-group bias, the former because of the threat of losing distinctiveness and the latter because of the saliency of otherness. A moderately similar out-group, however, is neither similar enough to pose a threat to the distinctiveness of the in-group, nor dissimilar enough that differences are great enough to arouse emphasis on intergroup salience. This suggests that a moderately similar group would trigger the least outgroup bias, making the relationship between similarity and outgroup bias a U-shaped one (See Figure 1). The current research sets out to explore this hypothetical model in the case of cultural similarity and home country bias.

**Figure 1: Explorative Relationship between Similarity and Out-group Bias.**
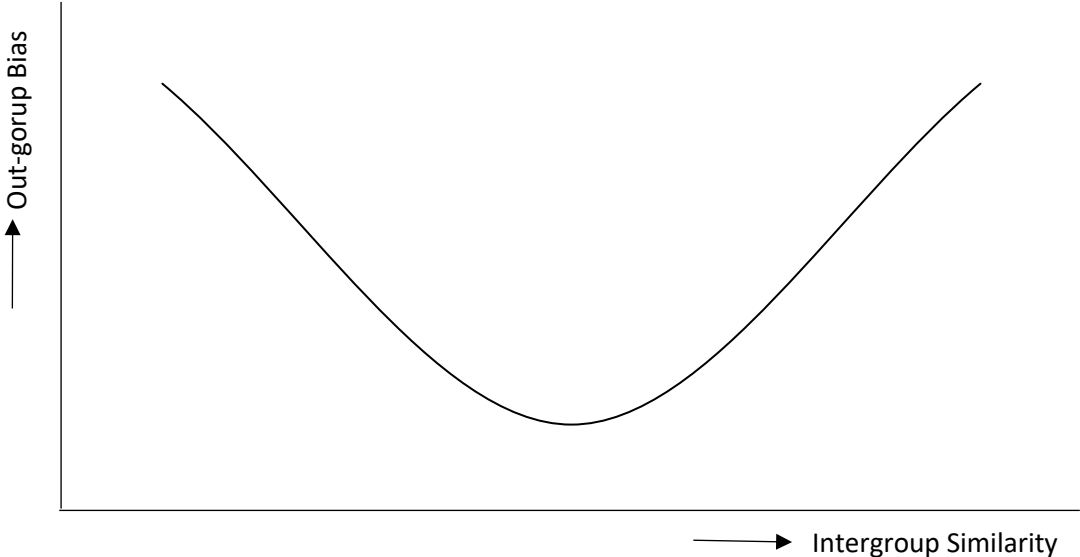
## 3. Conceptual Framework

As explained before, the level of home country bias a consumer portrays is determined by the amount the in-group is positively differentiated from the out-group, either by overvaluing the in-group and/or devaluing the out-group. Home country bias is predicted by both the level of national identification (NI) and the level of consumer ethnocentrism (CE), two variables that differ per individual and have shown to have different effects on home country bias. According to Verlegh (2007), people with a higher level of both tend to evaluate domestic products more positively compared to foreign alternatives. People with a higher level of CE tend to evaluate foreign products more negatively, independent of the cultural similarity between the foreign country and the domestic country. This same outwards tendency is not seen with high levels of NI. Thus, this leads to the following hypotheses:

*H1: The higher the levels of consumer ethnocentrism, the greater the home country bias.*

> *H1a: The higher the levels of consumer ethnocentrism, the more positive the domestic product evaluation.*

> *H1b: The higher the levels of consumer ethnocentrism, the more negative the foreign product evaluation.*

*H2: The higher the levels of national identification, the greater the home country bias.*

> *H2a: The higher the levels of national identification, the more positive the domestic product evaluation.*

**Figure 2: Conceptual Framework for the Current Study.**
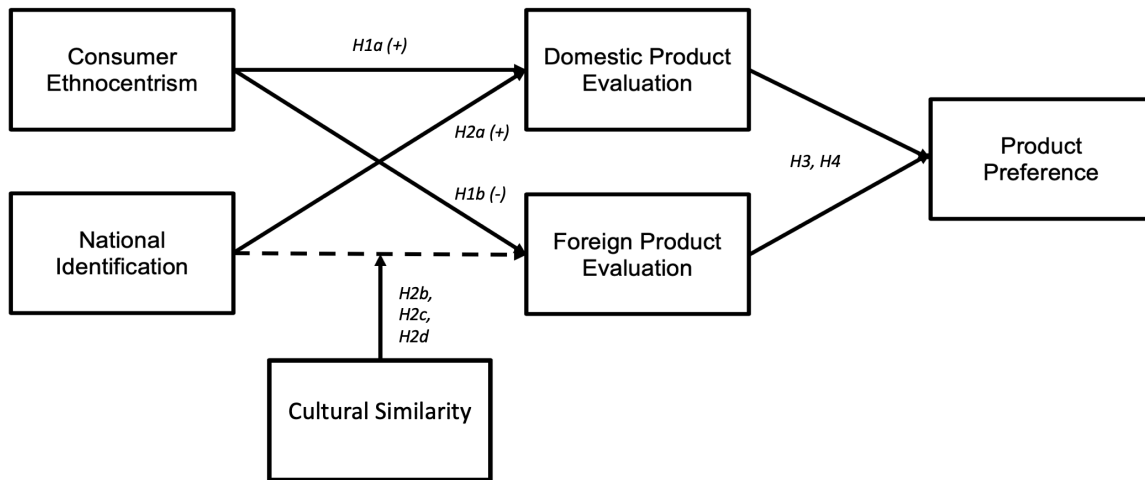


The current research looks at the moderating effect of the level of cultural similarity between the home country and a foreign country on home country bias (see Figure 2). As discussed in the Theoretical Background (see 2.4), consumer ethnocentric people are assumed not to be influenced by cultural similarity in their foreign product evaluations. National identification, however, is expected to be influenced in its effect on foreign product evaluation. The following explorative hypotheses are based on the model proposed in the Theoretical Background (See 2.4.2).

> *H2b: Cultural similarity has a moderating effect on the relationship between national Identification and foreign product evaluation.*

> *H2c: For countries high in cultural similarity and low in cultural similarity, the higher the level of national identification, the more negative the foreign product evaluation.*

> *H2d: For countries with moderate levels of cultural similarity, the level of national identification does not influence the foreign product evaluation.*

The different influences of the independent variables on intergroup bias need to be taken into account, as not everyone who scores high on NI will score high on CE, and vice versa. The separate and combined effects of NI and CE therefore need to be considered. Table 1 gives an overview of the predicted effects.

**Table 1. Hypothesized effects of CE and NI.**

|              | Domestic EVAL | High CS    | Medium CS  | Low CS     |
|--------------|---------------|------------|------------|------------|
| Low CE & NI  | Base level    | Base level | Base level | Base level |
| High CE      | +             | -          | -          | -          |
| High NI      | +             | -          | 0          | -          |
| High CE & NI | ++            | --         | -          | --         |

As shown in Table 1, the two independent variables lead to different levels of positive in-group bias and negative out-group bias, as an effect of differences in cultural similarity. This then creates different levels of home country bias when it comes to evaluating products of the in-group and out-group. Next, home country bias in product preference is also expected to vary due to cultural similarity, as an effect of these varying differences between domestic and foreign product evaluation. The following hypotheses therefore concern preference strength (PREF):

*H3: The higher the levels of consumer ethnocentrism, the more likely the domestic product is preferred, mediated by the difference in evaluations of the domestic and foreign products.*

*H4: The higher the levels of national identification, the more likely the domestic product is preferred, mediated by the difference in evaluations of the domestic product and foreign products.*

## 4. Method & Materials

In order to test the conceptual framework and the accompanying hypotheses, an empirical study was conducted in the Netherlands. Participants were asked to evaluate and indicate their preference for four products, which only varied in country of origin. One of the products concerned the domestic product, the other three were produced in three countries that varied in levels of cultural similarity to the Netherlands. Participants' levels of national identification and consumer ethnocentrism were measured in order to examine any potential differences in evaluation and preference strength.

### 4.1. Country Selection

Since the study was conducted in the Netherlands, domestic product evaluation concerned a product produced in the Netherlands. Foreign product evaluation concerned the same product, but then produced in one of the three other countries. Three foreign countries were selected based on varying levels of cultural similarity as determined by Hofstede's Cultural Similarity Index (Hofstede, 1980; Hofstede Insights, n.d.). This index was developed to map perceived value system differences across 76 different nations. It is based on six dimensions along which the dominant value systems can be ordered: Power Distance, Individualism/Collectivism, Masculinity/Femininity, Uncertainty Avoidance, Long Term Orientation/Short Term Normative Orientation, and Indulgence/Restraint. The cultural distances between the Netherlands and each foreign country were calculated by summing the difference scores for the six dimensions on national culture as determined by the CSI. A similar method is used by Ma et al. (2012). The selected countries were, from most similar to least similar to the Netherlands: France (CS: 125), Spain (CS: 152), and Morocco (CS: 216).

### 4.2. Pre-Test

A pre-test was conducted to test whether Dutch consumers judge the three foreign countries as culturally similar to the Netherlands according to the CSI. The pre-test sample consisted of 34 subjects who participated in an online questionnaire (see Appendix A for the full pre-test questionnaire). First, participants were asked to indicate on a seven-point scale the extent to which they agreed with statements concerning the similarity between the Netherlands and each foreign country (running from 'strongly disagree' to 'strongly agree'). The scale used to

measure Perceived Cultural Similarity was developed especially for this pre-test, using three reflective items (France: $\alpha$ = .80; Spain: $\alpha$ = .83; Morocco: $\alpha$ = .835) and three formative items (France: $\alpha$ = .28; Spain: $\alpha$ = .34; Morocco: $\alpha$ = .59). The three formative items concerned language, history and norms and values. Although the Cronbach's alphas for these items are rather low, the decision was made not to exclude them. These three items are based on Ma et al.'s (2012) determinants of cultural similarity and therefore have a theoretical basis. Furthermore, reliability analyses show that the Cronbach's alphas for the entire scale per country are still high enough to adequately measure Perceived Cultural Similarity (France: $\alpha$ = 72; Spain: $\alpha$ = .79; Morocco: $\alpha$ = .86). A second task, in which participants were asked to place the countries on a ten-point scale from culturally very dissimilar to culturally very similar, was implemented as a second, more implicit measure of perceived cultural similarity.

Analysis of the results of these two tasks show that indeed, France is perceived as most culturally similar to the Netherlands ($M_{task1}$ = 4.40, $SD_{task1}$ = 0.86; $M_{task2}$ = 6.74, $SD_{task2}$ = 1.24), followed by Spain ($M_{task1}$ = 3.88, $SD_{task1}$ = 0.99; $M_{task2}$ =5.65, $SD_{task2}$ = 1.61), with Morocco being perceived as most culturally dissimilar ($M_{task1}$ = 2.75, $SD_{task1}$ = 1.03; $M_{task2}$ = 3.50, $SD_{task2}$ = 1.78). A Repeated Measures analysis of both tasks was conducted to see whether the differences in Perceived Cultural Similarity are significant. For the six-item question task, analysis shows that the sphericity assumption was violated ($\chi^2$(2) = 20. 89, $p$ < .001). Therefore, a Greenhouse-Geisser correction was applied to the Repeated Measures analysis, which shows that the means for the first task are not equal ($F$(1.35, 54.830) = 44.61, $p$ < .001). A Bonferroni post-hoc test shows that they are all significantly different from each other (i.e. the mean differences are all significant at $p$ < .001). The same analysis was done for the ten-point scale task, where again the sphericity assumption is shown to be violated ($\chi^2$(2) = 7,30, $p$ < .05). The Repeated Measures analysis, with a Greenhouse-Geisser correction, shows that the scores are again not equal ($F$(1.66, 54.83) = 66.80, $p$ < .001). A Bonferroni post-hoc test shows that all means are significantly different from each other (i.e. the mean differences are all significant at $p$ < .001).

During the pre-test, participants were furthermore asked to give reasons why they would prefer the domestic product over a foreign alternative. Wanting to support one's nation is one of the reasons why one would buy domestic, however, there are other reasons that of course need to be controlled for when measuring the effect of national identification and consumer ethnocentrism on preferring domestic. 52.9% of the participants mentioned that

sustainability and environmental concerns motivated them to buy domestic. 38.2% thought quality concerns were a reason to buy domestic, and 23.5% bought domestic because it was cheaper. Lastly, 20.6% gave patriotism as a reason. It is important to control for the first three arguments, in order to ensure that the effect of the independent variables and the moderator is accurately measured. A similar question was included in the actual study in semi-open form, with the answers given in the pre-test as options. This was done in order to ensure that the relevant arguments were indeed controlled for.

### 4.3. Product

Tomatoes were the product chosen for evaluation. Most consumers are familiar with this product and consume it on a regular basis. Furthermore, all four countries have a sizeable tomato production, meaning that the product evaluations are of realistic product origins. Additionally, although the three foreign countries differ in geographical distance (thereby increasing for example the ecological impact of products that need to be transported to the Netherlands for countries further away), the tomato production in the furthest countries (Morocco and Spain) have a smaller ecological impact due to differences in cultivation styles with the Netherlands: whereas Dutch tomatoes are cultivated in energy costly greenhouses, Moroccan and Spanish tomatoes are grown in open air or in glasshouses (information provided by S. Van der Werff, R&D specialist for Bakker Barendrecht, personal communication, 23rd January, 2020). Although the information provided to participants in the study controlled for the influence of sustainability through dummy 'Sustainability Scores' that were equal for all four countries, it is important that this is done based on realistic assumptions.

Another important advantage of tomatoes is that it is mostly sold as an unbranded product, with country of origin and price as the only sources of information provided to the consumers (apart from physical appearance). This means that if price is being held constant, the country of origin is the only variable that can be manipulated, which facilitates measuring country-of-origin effect.

## 4.4. Data Collection and Sample

Data was collected by means of an online questionnaire (see Appendix B for the full questionnaire). Participants were sampled via a mixture of snowball and convenience sampling. Although this has a risk of leading to biased results, this method is the most cost-effective to gather an extensive sample size. Attention was paid to gather a diverse sample, in order to ensure enough variance in the two independent variables. Therefore, the questionnaire was also shared in online groups for Dutch people who support Dutch farmers, as these people are assumed to be more nationalistic and consumer ethnocentric than the average Dutch consumer.

The sample consisted of 170 respondents that completed the entire questionnaire. After screening the data for duration time and response variance, one respondent was removed from the data set due to low response variance across the entire questionnaire. Furthermore, four respondents had low response variance in one set of questions. Since we cannot know for sure whether these four respondents answered these questions according to their true beliefs or without any logic behind it, it was decided not to remove these respondents. This leads to a sample of 169 Dutch respondents.

Demographics were measured at the end of the questionnaire, as studies have shown that variables such as age, education and gender have an effect on the size of the country-of-origin effect: older and lower educated consumers are more influenced by country of origin (Verlegh, 2001). Moreover, research on the demographic antecedents of CE has shown that age and education are respectively positively and negatively related to CE, and there is some evidence that women might be more CE than men (Sharma et al., 1994).

## 4.5. Measurements

### 4.5.1. Product Evaluations

The questionnaire started with measuring the evaluations of the four different products. Participants were presented with pictures of tomatoes on the shelves of a supermarket. On these pictures, a sign was visible on which information about the products is given. The only differences between the four pictures was the country of origin, other variables such as physical appearance, price and a label concerning sustainability remained the same. Participants were first introduced to the Dutch tomatoes, after which their perception of the

tomatoes was measured via seven evaluative statements for which they could indicate on a seven-point scale (running from 'strongly disagree' to 'strongly agree') the extent to which they agreed or not. It was crucial that the Dutch product was introduced first, since participants needed to know there was a relevant domestic alternative to the foreign products. Next, evaluations of the three foreign products were measured using the same evaluative statements.

A PCA over all the items across all respondents was conducted to see if the average of the items could be taken to create four evaluation scores. All the items loaded on a single factor, meaning this was possible. Furthermore, four Reliability Analyses for each evaluation reveal Cronbach's $\alpha$'s higher than .90.

### 4.5.2. Preference Strength

Participants were presented with six combinations of two country-of-origins, and asked to indicate their preference strength for one each time on a five-point Likert scale (ranging from 'Strongly prefer Option A' to 'Strongly prefer Option B'). The median on the scale represented the option 'I have no preference', a realistic and necessary option to test the hypotheses. This method of grading paired comparisons is preferable over a simple binary choice task, as it allows participants to indicate the strength of their preference without forcing them to make a choice. This not only increases participant engagement, it also leads to more nuanced preference ranking and higher face validity (Brown & Maydeu-Olivares, 2018).

Preference strength for each product was created by scoring each of the six graded-paired comparisons, with 'Strongly Prefer' receiving a +2 (and the other option a -2), 'Slightly Prefer' a +1 (and the other option a -1) and 'No Preference' a +0. The three resulting scores were summed to create an overall Preference Strength for each country, with a semi-continuous scale between -12 and 12.

### 4.5.3. National Identification and Consumer Ethnocentrism

After the product evaluations and the preference measurement, personal levels of national identification and consumer ethnocentrism were measured. NI was measured with five items, taken from Feather (1981), Duckitt and Mphutting (1998), and Doosje, Branscombe, Spears and Manstead (1998). This scale was pretested and refined in several small-scale surveys

which indicated internal and external validity (Verlegh, 2001). CE was measured with five items of the CETscale, a scale developed by Shimp and Sharma (1987). This shortened version has also been validated in an earlier study among over 3000 consumers across the EU (Steenkamp, Ter Hofstede, & Wedel, 1999).

A Reliability Analysis for NI reveals a Cronbach's $\alpha$ of .794. The average of the five items was taken to create the variable 'National Identification' ($M_{NI}$ = 5.15, $SD_{NI}$ = 0.08). Analysis shows that this variable follows a normal distribution ($D$ (169) = 0.06, $p$ > .05).

A Reliability Analysis of the items measuring CE shows a Cronbach's $\alpha$ of .937. A variable 'Consumer Ethnocentrism' was created by taking the average of the five items ($M_{CE}$ = 4.08, $SD_{CE}$ = 0.14). Analysis shows that the normality assumption was slightly violated ($D$ (169) = 0.10, $p$ = .000), however, it has been decided to ignore this in further analyses since the subsequent analyses are fairly robust to non-normality (Laerd Statistics, 2015).

A Pearson Correlation analysis shows that the two independent variables are slightly correlated ($r$ (169) = .43, $p$ < .001). Therefore, an interaction term was built using mean-centred variables.


### 4.5.4. Control Variables

After each evaluation, participants' prior experience with the product-country combination was measured, as this has been shown to positively influence consumers' beliefs concerning a product from this country (Verlegh, 2001). This was measured with a two-item scale for each of the four products. However, both during data collection and data analysis, it became clear that the construct validity of this scale was violated. Respondents remarked that they had little idea where their tomatoes came from and that they had wished to see an option 'I don't know'. Furthermore, during analysis it became clear that many respondents had seen French tomatoes in store, whereas this is realistically not possible as the R&D specialist of fruit and vegetable distributor Bakker Barendrecht has stated that French tomatoes are almost never offered in Dutch supermarkets (S. Van der Werff, personal communication, 23rd January, 2020). Based on these notions, it was assumed that the scale does not actually measure product-country combination experience and was therefore removed from the analysis.

Furthermore, participants' familiarity with the three foreign countries was measured, as direct experiences (such as holidays or family relations) or indirect experiences (such as

media or art) with a foreign country is likely to influence people's affection towards said country, which in turn might influence their product evaluations. For the three foreign countries, experience with the country was measured with a four-item scale of formative items. A PCA showed that all the items loaded on one factor, meaning that the average could be taken to create 'Country Experience' variables. Cronbach's $\alpha$'s are relatively low (between .55 and .65), however since the scale was formative this is as predicted. A Repeated Measures analysis was conducted to test whether the mean scores between the three countries are equal. The analysis shows that the three mean scores are not equal ($F(2, 336) = 182.13$, $p <$ .001). A Bonferroni post-hoc was conducted to compare the experience mean scores pairwise, which shows that all the mean scores are significantly different from each other (i.e. the mean differences are all significant at $p < .001$). Thus, we can conclude that the sample had the most experience with France ($M_{Fr-EXP} = 2.27$, $SD_{FR-EXP} = 0.76$), followed by Spain ($M_{ES-EXP} = 1.95$, $SD_{ES-EXP} = 0.70$), and Morocco ($M_{MA-EXP} = 1.26$, $SD_{MA-EXP} = 0.44$).

# 5. Results

5.1. Demographics of National Identification and Consumer Ethnocentrism

23.7% of the sample was male, 75.1% female, 1.2% other. The average age was 40.7 ($SD$ = 16.1). Education levels were well-represented in the sample, with 15.4% having completed primary education secondary education, 26% having completed MBO, 26.6% having completed HBO and 32% having completed WO.

An independent sample t-test shows that women are more consumer ethnocentric ($M$ = 4.24, $SD$ = 1.77) than men ($M$ = 3.60, $SD$ = 1.91), $t(165)$ = -1.95, one-sided $p$ < .05). Furthermore, women identify more with their nation ($M$ = 5.30, $SD$ = 1.02) than men ($M$ = 4.74, $SD$ = 1.22), $t(165)$ = -2.92, $p$ < .05). A linear regression shows that age positively affects CE ($b$ = 0.047, $t(169)$ = 5.98, p < .001). Similarly, age positively affects levels of NI ($b$ = 0.027, $t(169)$ = 5.66, $p$ < .001). A one-way ANOVA reveals that levels of CE and NI significantly differ between the various levels of education ($F_{CE}(3, 165)$ = 25.78, $p$ < .001; $F_{NI}(3, 165)$ = 8.29, $p$ < .001) (see Table 2 and Table 3). A Tukey-Kramer post-hoc test shows that those with an MBO education score significantly higher on CE and NI than those with HBO or WO education levels (i.e. the mean differences between these pairs are significant at $p$ < .05). Furthermore, those with Primary or Secondary education score significantly higher on CE and NI than those with WO education (i.e. the mean differences between these pairs are significant at $p$ < .05).

**Table 2. National Identification per level of Education.**

| Education | M | SD | N |
|---|---|---|---|
| Primary/Secondary education[ab] | 5.43 | 1.01 | 26 |
| MBO[a] | 5.70 | 1.01 | 44 |
| HBO[bc] | 4.92 | 1.21 | 45 |
| WO[c] | 4.74 | 0.90 | 54 |

**Table 3. Consumer Ethnocentrism per level of Education.**

| Education | M | SD | N |
|---|---|---|---|
| Primary/Secondary education[ab] | 4.61 | 1.78 | 26 |
| MBO[a] | 5.32 | 1.65 | 44 |
| HBO[bc] | 4.21 | 1.50 | 45 |
| WO[c] | 2.71 | 1.24 | 54 |

5.2. Mean Scores Evaluation and Preference Strength

Table 4 gives an overview of the descriptives of the four product evaluations across the entire sample. A Repeated Measures analysis was done to test whether the four mean scores are equal. The analysis reveals that the sphericity assumption was violated ($\chi^2(5) = 85.42$, $p < .001$). Therefore, a Greenhouse-Geisser correction was applied for the estimated epsilon. The analysis shows that the scores for the different product evaluations are not equal ($F(2.18 ,366.48) = 48.80$, $p < .001$). A Bonferroni post-hoc was carried out for an analysis of the pairwise comparisons, which shows that all mean differences between the pairs are significant at $p < .05$, except for the mean difference between Spanish and French evaluations. We can thus conclude that Dutch tomatoes are significantly better evaluated than foreign tomatoes across all respondents, and that Spanish and French tomatoes score higher than Moroccan tomatoes.

**Table 4. Means and standard deviations for product evaluations.**

| Product evaluation | M | SD |
|---|---|---|
| NL-EVAL | 5.74 | 1.03 |
| FR-EVAL | 5.02 | 0.93 |
| ES-EVAL | 5.19 | 0.99 |
| MA-EVAL | 4.62 | 1.04 |

Similarly, mean preference strength scores across the entire sample were calculated for each country set (see Table 5). A Repeated Measures analysis was conducted to check whether the four scores are equal. The analysis reveals that the sphericity assumption was violated ($\chi^2(5)$ = 75.67, $p$ > .001). Therefore, a Greenhouse-Geisser correction was used for the estimated epsilon. The analysis shows that the scores for the preference strength are not equal ($F(2.26, 379.37)$ = 154.14, $p$ < .001). A Bonferroni post-hoc test indicates that all mean differences between pairs are significant at $p$ < .05, except for the difference in preference strength between France and Spain. We can thus conclude that across all respondents, Dutch tomatoes are preferred over foreign tomatoes, and Spanish and French tomatoes are preferred over Moroccan tomatoes.

**Table 5. Means and standard deviations for preference strength.**

| Preference Strength | M | SD |
|---|---|---|
| NL-PREF | 3.74 | 3.20 |
| FR-PREF | -0.65 | 2.07 |
| ES-PREF | -0.11 | 2.51 |
| MA-PREF | -2.98 | 2.18 |

5.3. Individual Country Analyses

In order to examine the effects of the consumer ethnocentrism and national identification on preference for each respective country origin, analyses were performed for each country separately. A mediated regression using Hayes PROCESS analysis (Model 4) was performed to analyse both the direct and indirect effects of the independent variables on preference.

The analysis for Dutch tomatoes (see Table 6) reveals that consumer ethnocentrism has a significant positive relationship with evaluation of Dutch tomatoes ($b$ = 0.161, $t$ = 3.605, $p$ < 0.05). This is in line with *Hypothesis 1a*. National identification, similarly, is positively related to Dutch tomato evaluation ($b$ = 0.178, $t(169)$ =  2.380, $p$ < 0.05), which is line with *Hypothesis 2a*. As expected, the preference for Dutch tomatoes is affected positively by NL-EVAL ($b$ = 1.741, $t$ = 0.183, $p$ < 0.05). The positive direct effect of CE on NL-PREF is also proven to be significant ($b$ = 0.582, $t$ = 5.338, $p$ < 0.05), whereas for NI this effect is shown to be

insignificant (meaning *Hypothesis 4* is already not supported). Therefore, only a mediation analysis is performed for CE, which reveals that the indirect effect of CE on NL-PREF, as mediated by NL-EVAL, is significant (*IE* = 0,281, 95% *CI*: [0.111, 0.457]). This is 32.6% of the total effect of CE on NL-PREF, thus the relationship is partially mediated by NL-EVAL.

**Table 6. Mediated Regression Analysis for the Netherlands.**

|  | NL-EVAL | NL-PREF (direct) | NL-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.161* | 0.582* | 0.281* | 32.6% |
| National Identification | 0.178* | -0.199 | - | - |
| Interaction | -0.011 | -0.036 | - | - |
| NL-EVAL | - | 1.741* | - | - |
| R$^2$ | 0.161 | 0.522 | - | - |

*Significant at p <0.05

The analysis for French tomatoes (see Table 7) reveals that CE is negatively related to evaluation of French tomatoes (*b* = -0.147, *t* = -3.575, *p* < 0.05), supporting *Hypothesis 1b*. Interestingly, NI is positively related to French evaluation (*b* = 0.135, *t* = 2.017, *p* < 0.05), thereby not supporting *Hypothesis 2c*, which predicted that tomatoes coming from a culturally similar country would receive a lower evaluation the higher NI. The interaction term and FR-EXP is also shown to significantly predict FR-EVAL, so it is right to control for this. Furthermore, FR-EVAL is seen to be positively related to FR-PREF, however, the regression analysis did not reveal significant direct effects of CE and NI on FR-PREF, thereby making mediation analysis redundant. Despite the fact that the relationship between NI and FR-PREF is in a negative direction as predicted, the relationship is not significant.

**Table 7. Mediated Regression Analysis for France**

| | FR-EVAL | PREF (direct) | PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | -0.147* | 0.083 | - | - |
| National Identification | 0.135* | -0.152 | - | - |
| Interaction | -0.070* | -0.052 | - | - |
| FR-EVAL | - | 0.620* | - | - |
| FR-EXP | 0.279* | 0.490* | - | - |
| $R^2$ | 0.173 | 0.142 | - | - |

*Significant at $p < 0.05$

The analysis of Spanish tomatoes (see Table 8) shows that CE is indeed negatively related to ES-EVAL ($b$ = -0.186, $t$ = -4.000, $p < 0.05$), thereby again supporting *Hypothesis 1b*. NI is not significantly related to ES-EVAL, which is in line with *Hypothesis 2d*. As expected, ES-EVAL is significantly related to ES-PREF ($b$ = 0.850, $t$ = 4.495, $p < 0.05$), and a direct negative effect between CE and ES-PREF is shown ($b$ = -0.206, $t$ = -1.743, $p < 0.05$). NI is again not directly significantly related to ES-PREF, therefore a mediation analysis is only carried out for CE. This shows that there is a significant indirect effect of CE on ES-PREF, mediated by ES-EVAL (*IE* = -0.158, 95% *CI*: [-0.264, -0.30]). This accounts for 43.5% of the total effect.

**Table 8. Mediated Regression Analysis for Spain**

| | ES-EVAL | ES-PREF (direct) | ES-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | -0.186* | -0.206* | -0.158* | 43.5% |
| National Identification | 0.060 | -0.139 | - | - |
| Interaction | -0.014 | 0.083 | - | - |
| ES-EVAL | - | 0.850* | - | - |
| ES-EXP | 0.167 | 0.332 | | |
| $R^2$ | 0.144 | 0.222 | - | - |

*Significant at $p < 0.05$

The last analysis of this set of analyses concerns Moroccan tomatoes (see Table 9). Again, CE is negatively related to MA-EVAL ($b$ = -0.149, $t$ = -3.941, $p < 0.05$), confirming the last part of *Hypothesis 1b*. Similar to France, NI is positively related to MA-EVAL, however only when a one-sided p-value is calculated ($b$ = 0.148, $t$ = 1.968, one-sided $p$ = 0.025). However, the direction of the relationship contradicts the direction as predicted in *Hypothesis 2c*, where NI was thought to have a negative relationship with the evaluation of a product from a culturally dissimilar country. Furthermore, regression analyses between the independent variables and MA-PREF show that again only CE has a direct effect on MA-PREF, and NI does not. Mediation analysis on CE shows that the relationship is indeed mediated by MA-EVAL (*IE* = -0.066, 95% *CI*: [-0.168, 0.018]). This accounts for 19.3% of the total effect.

## Table 9. Mediated Regression Analysis for Morocco

| | MA-EVAL | MA-PREF (direct) | MA-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | -0.261* | -0.275* | -0.066* | 19.3% |
| National Identification | 0.148** | -0.009 | - | - |
| Interaction | -0.001 | 0.096 | - | - |
| MA-EVAL | - | 0.252 | - | - |
| MA-EXP | -0.004 | 0.376 | | |
| $R^2$ | 0.173 | 0.104 | - | - |

*Significant at $p < 0.05$; **Significant at one-sided $p < 0.05$

### 5.4. Between Country Analyses

The previous analyses show that CE negatively influences foreign country product evaluations, whereas NI positively influences foreign product evaluations in the case of France and Spain. However, do the individual difference scores in consumer ethnocentrism and national identification influence how consumers see the foreign countries respective of each other and of the Netherlands? In other words, do the independent variables lead to variations in the differences between evaluations, as an effect of cultural similarity? And do these differences in evaluation then lead to differences in preference? For this, mediated regression analyses were performed again, this time with the differences between preference strengths as dependent variables and the differences between evaluations as the mediators. The relevant country experiences were included to control for these.

The analyses (see Appendix C for tables) show that national identification has no significant effect on the differences between any of the countries in evaluation and preference, thereby not supporting *Hypothesis 2c* and *Hypothesis 4*. Consumer ethnocentrism has a positive significant effect on the difference between preference for Dutch tomatoes and foreign tomatoes, mediated by the differences in evaluations. This supports *Hypothesis 3*. Firstly, CE is shown to positively influence the difference between the Netherlands and France in evaluations ($b = 0.300$, $t = 5.398$, $p < .001$) (see Table 10). Moreover, CE is seen to have a

direct positive significant effect on the difference in preference strength between the Netherlands and France ($b$ = 0.365, $t$ = 2.269, $p$ < .05). Mediation analysis shows that this difference is also indirectly influenced by CE, mediated by the difference in evaluations ($IE$ = 0.448, 95% $CI$: [0.228, 0.655]). This accounts for 55.1% of the total effect of CE on the difference in preference strength.

The difference in evaluation between the Netherlands and Spain is also positively significantly affected by CE ($b$ = 0.324, $t$ = 5.031, $p$ < .001) (see Table 11). The difference in preference strength between the two countries is directly influenced by CE ($b$ = 0.508, $t$ = 2.431, $p$ < .05), but also for 55.9% mediated by the difference in evaluations ($IE$ = 0.645, 95% $CI$: [0.375, 0.930]).

Lastly, the analysis of the effect of CE on the difference between the Netherlands and Morocco in evaluations shows that this relationship is positive and significant ($b$ = 0.422, $t$ = 6.672, $p$ < .001) (see Table 12). Furthermore, CE directly significantly influences the difference in preference strength between the two ($b$ = 0.622, $t$ = 3.024, $p$ < .05). There is also a significant indirect effect, as the difference in evaluations is seen to mediate the relationship between CE and the difference in preference strength for 48.7% ($IE$ = 0.591, 95% $CI$: [0.314, 0.907]).

However, an analysis whether the effect of CE and NI is different between the foreign countries show that only the difference in evaluations between France and Morocco is positively influenced by CE ($b$ = 0.114, $t$ = 2.516, $p$ < .05), other differences are insignificant (see Tables 13-15). The difference in preference strengths between France and Morocco was not significantly influenced by CE, however.


5.5. Explorative Analysis of the Effect

Despite the insignificance of some of the results, it is interesting to zoom in at different levels of national identification and consumer ethnocentrism to see the differences in evaluations between countries. To this end, an explorative analysis zooming in on the effect of different levels of CE and NI was conducted. The continuous variables CE and NI were divided into three categories each (Low, Moderate, High). Membership of each category was decided by the tertiles of the sample distribution. Participants were then divided into nine groups based on their values for the two categories. It is important to note that due to small sample size of each group, analyses based on these groups are compromised and cannot be used to make

assumptions concerning the hypotheses. Moreover, the cut-off point for when someone scores high on NI, for example, is arbitrarily based and therefore loses some of its meaning. However, by creating these groups, differences in evaluations between groups become visible, thereby making the bonuses and minuses effected by CE and NI clear.

Each groups' mean scores for the four evaluations are represented in a graph in Figure 3. Based on the results from this study and the theoretical background, the assumption can be made that someone in the Low-Low group does not portray any home country bias. When moving up the X-axis, home country bias is seen to increase (as both domestic receives a bonus and foreign a minus). When moving up the Y-axis, the differences between the groups is seen to be less extreme. Domestic is seen to receive a positive bias, but so do France and Morocco (although much smaller and it decreases in the High NI group). Spain, on the contrary, does not receive a clear positive or negative bias. Across the entire graph, the effects of CE and NI are seen to counter each other when it comes to France and Morocco, whereas they seem to contribute to each other in the case of the Netherlands.

**Figure 3. Mean Evaluation Scores for Groups differing in CE and NI**
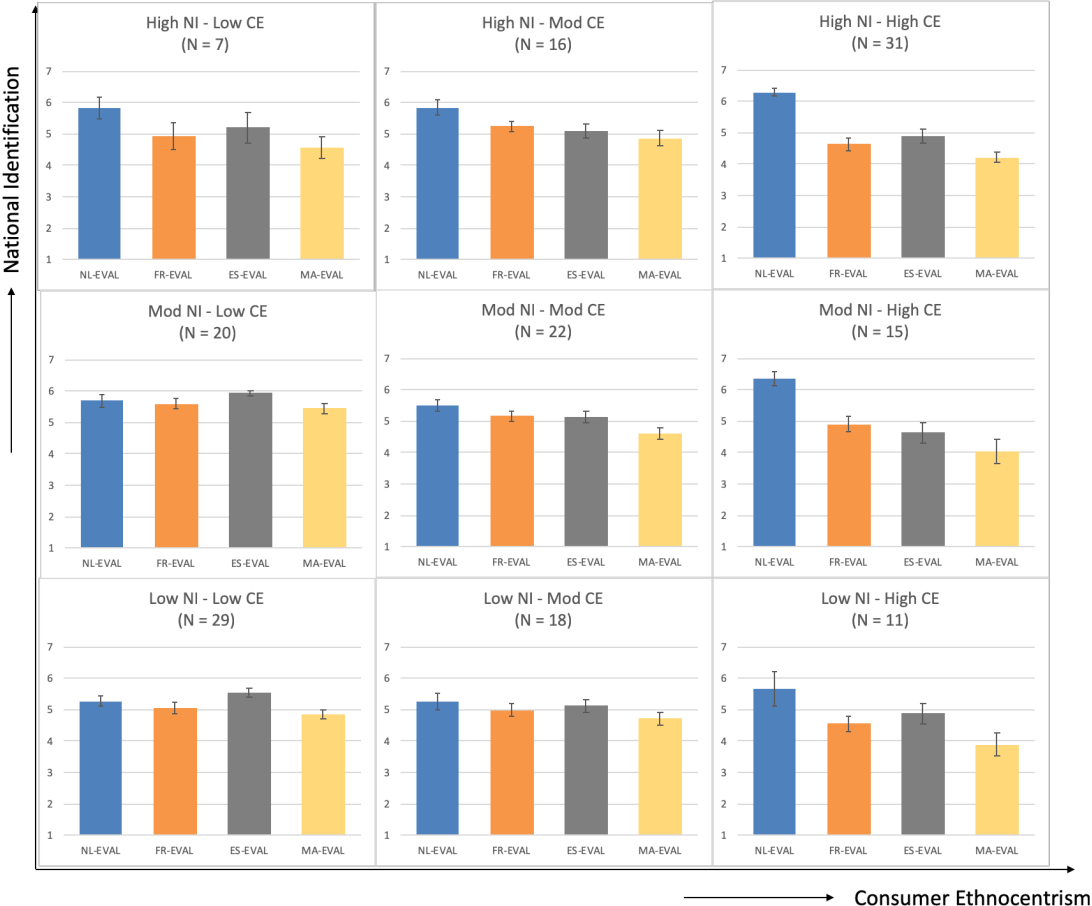
## 5.6. Arguments to Buy Domestic

National identification and consumer ethnocentrism are two antecedents of home country bias, however not the only ones. Other arguments could persuade someone to buy a domestic product over a foreign one, and it is important to control for these as much as possible in the study design. Analysis shows that there were four main arguments to prefer domestic products over foreign alternatives (see Figure 4). Both Sustainability and Price were kept constant across all four countries. The other two arguments were encapsulated in the variables used in the study design.

**Figure 4. Percentage of respondents supportive of Arguments for Domestic.**
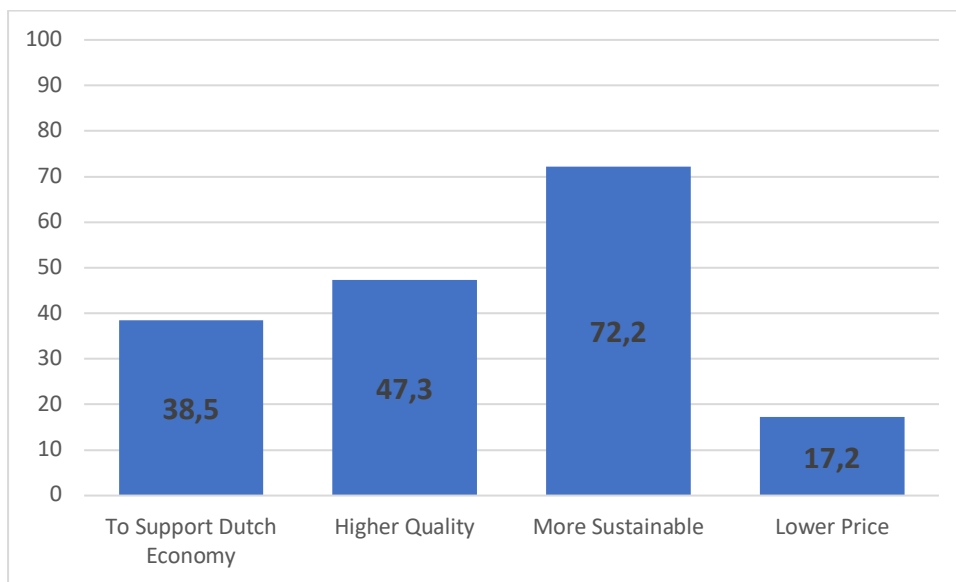
## 6. Conclusion

The current research was concerned with the role of cultural similarity in home country bias. Two individual difference variables, consumer ethnocentrism and national identification, were found to have varying effects on domestic and foreign product evaluations and preference, although the effect of cultural similarity was seen to be marginal.

In line with previous studies and the respective hypotheses for the current study, the level of consumer ethnocentrism a consumer portrays has a positive effect on evaluations of domestic products, and a negative effect on evaluations of foreign countries. This supports *Hypothesis 1.* Subsequently, the two-fold increase in differences between the domestic and foreign evaluations leads to a higher preference for domestic products, thereby supporting *Hypothesis 3*. Between the foreign countries, the effect of consumer ethnocentrism was only significantly different in the evaluations between France and Morocco.

National identification with the Netherlands was also found to have a positive effect on domestic evaluation, however, there was no significant direct effect on domestic preference strength. Indeed, there was no significant direct effect of national identification on preference for any of the four countries. Therefore, the results did not support *Hypothesis 4.* Furthermore, contrary to previous studies and to the explorative model tested in the current study, a culturally similar country like France and a culturally dissimilar country like Morocco received more positive evaluations the higher the level of national identification, whereas a moderately similar country such as Spain was not affected. Thus, instead of the U-shaped model proposed in this study (in which countries with high levels of cultural similarity and countries with low levels of cultural similarity would receive more negative outgroup bias than countries with moderate levels of cultural similarity), the results point to the direction of an inverted U-shaped model. This thus implies that home country bias, when facing a similar or dissimilar country, does not necessarily increase. When facing a moderately similar country, home country bias increases, only as an effect of in-group bias. Therefore, *Hypothesis 2* concerning the increase of home country bias as an effect of national identification is only confirmed when it comes to moderately similar countries, most of it is not supported. Important to note is that there were no significant differences between country evaluations or preferences as an effect of NI. Therefore, we cannot conclude that national identification

is influenced by cultural similarity when evaluating foreign products or indicating one's preference for products from different countries.

**7. Discussion**

<u>7.1. Discussion of the Findings</u>

Although the conclusions that can be drawn from the present study show some overlap with previous studies and the predictions made in this study, there are many interesting deviations as well. First of all, there are certain differences between consumer ethnocentrism and national identification that require some extra thought. Although it is not surprising that consumer ethnocentrism has a stronger effect on product preference than national identification (as the former was seen as a step further than the latter, see 2.3), it is remarkable that the level of national identification does not appear to have an effect on product preference at all, even in the case of domestic products. Perhaps this could be explained by the fact that whereas consumer ethnocentrism leads to a two-fold increase in the differences in evaluations between domestic and foreign, the differences between domestic and foreign evaluations caused by national identification are seen to be mitigated by the positive bonus given to products from similar and dissimilar countries. Therefore, although nationalistic people give higher ratings to domestic products than non-nationalistic people, they also give higher ratings to some foreign products. The overall level of intergroup bias caused by national identification is therefore minimal, and thus does also not translate to differences in preference.

This is related to the most interesting deviation from the predictions as well, namely the fact that national identification is seen to lead to higher evaluations for products from similar and dissimilar countries. Not only is this a break from previous studies (where no effect of national identification on foreign product evaluation was seen, similarly to what is now seen for moderately similar countries), it also goes against the model proposed by the current study. Instead of similar and dissimilar countries receiving more negative bias then moderately biased countries, they are now seen to receive a positive bias instead. This points to two things: first, this means that Jetten et al. (1998) were in the right direction with their interpretation of the opposing effects of Social Identity theory and Self-Categorization theory. According to them, moderately similar group would receive the most differentiation, as they are similar enough to be relevant for comparison, yet not too dissimilar in that differences become extra salient. However, although they were correct in predicting that the relationship between similarity and differentiation would be curvilinear, the current study does not show

that moderately similar groups receive more negative bias: the opposite, namely they receive no bias. The relationship becomes curvilinear (although not significantly so) because similar and dissimilar groups receive positive bias compared to people low in national identification.

This brings us to the second point: the finding that similar and dissimilar groups receive a positive bias is remarkable, as it would suggest that people who identify more with their own group are then also more positive about other groups as well. This calls to mind the earlier cited words of Crocker et al. (1987) concerning how in-group bias is largely a function of in-group enhancement rather than of out-group derogation. Now we find that not only do people who identify strongly with their nation not engage in out-group derogation, they extend their enhancement to certain out-groups as well. Once again, the integration of Social Identity theory and Self-Categorization theory might be of use to explain this phenomenon. On the one hand, dissimilar groups are too different to be perceived as an effective threat to the in-group's stability and survival (as explained by Social Identity theory). Because of this reduction in threat, high identifiers potentially feel safe enough to be more positive in their evaluations. On the other hand, similar groups might not be different enough to evoke bias based on saliency (as explained by Self-Categorization theory). In fact, similar groups might be so similar that group lines become blurred, leading to the out-group and in-group being categorized together on a superordinate level. A positive bias towards the out-group could then be seen as an extension of home country bias.

Lastly, although not hypothesized, the current study found that consumer ethnocentrism led to a significantly higher evaluation for France than for Morocco. This suggests that consumer ethnocentrism is susceptible to cultural similarity: the lower the culturally similarity, the lower the evaluation. The lack of significant differences between France and Spain and between Spain and Morocco could be explained by the fact that perhaps the differences in cultural similarity between these countries were not large enough to have an effect.

### 7.2. Limitations and Suggestions for Future Research

The findings that there were no significant differences between product evaluations caused by national identification and that there was only a difference between the most similar and most dissimilar country as an effect of consumer ethnocentrism point out that perhaps the

similarity differences between the chosen countries were not large enough to evoke large effects. Especially the distance between France's and Spain's Hofstede's CSI scores (respectively 125 and 152) was relatively small compared to the distance between Spain and Morocco (respectively 152 and 216). The countries were originally selected based on their tomato production capacity. Furthermore, due to the manner of tomato production in each country, sustainability differences in tomato production and transportation were relatively minimal (something that could otherwise be taken into account in evaluations and preference). However, in order to accurately explore the effect of cultural similarity on home country bias, it is necessary to create a study design in which cultural similarity differences between the chosen countries are large enough to measure how different levels of cultural similarity affect the relationship between consumer ethnocentrism and national identification on the one side and intergroup evaluations on the other side. Future research could therefore include a larger range of cultural similarity to test the curvilinear relationship between similarity and differentiation for national identification and the negative linear relationship for consumer ethnocentrism.

Another limitation involving the selected countries is that perhaps they did not trigger negative bias for high identifiers because they were not perceived as competitors or threats to the home country's positive social identity. If so, the setting lacks the context of a so-called 'zero sum' game, in which any reward for the out-group means a cost to the in-group. Without such a context, there is no need for actively negating the out-group or its products through negative bias (Verlegh, 2007). The present study operated in a context where the home country and two of the three foreign countries are all members of the European Union, which might have lowered the competitiveness of the situation. In fact, studies have shown both the establishment of a European identity, especially for those who identify strongly with their nation (Cinirella, 1997), and a positive bias of Europeans towards products with the label 'Made in the EU' (Schweiger, Haubl and Friederes, 1995). The fact that Morocco, which is the only country that does not belong to this 'cooperative' context due to not being a member of the EU, received the lowest overall scores (and the lowest scores in 'Country Experience') could be in support of this argument. Additional research is therefore needed to test whether the existence of a supranational entity such as the EU could influence the effect of cultural similarity on home country bias. It is then of importance that next to the level of national identification, the level of identification with the supranational entity is measured as well.

On a related note, the selected product may be another reason why there might not have been the competitive context necessary to evoke negative bias. According to Alden, Steenkamp and Batra (1999), products differ in the extent to which they are connected to a culture, meaning that the type of product category might influence the strength of home country bias (Verlegh, 2007). Although food products are often strongly linked to culture, an argument could be made that tomatoes have a relatively weak affiliation with Dutch culture. Dutch consumers might have therefore not perceived the threat of foreign tomato productions to domestic tomato production economy as extensively as they would have if the chosen product had been a product with a stronger link to Dutch culture (such as beer or cheese). Research is therefore needed to see whether different products or product categories evoke different effects from cultural similarity. Important is then that the selected countries produce the chosen product with equal or similar quality.

A last limitation of the study design that could have impacted the level of bias evoked is that the study was performed in the Netherlands with a Dutch sample. Research has shown that there are cross-cultural differences in home country bias (as referenced in Verlegh, 2007), however, most of the research has focused on developing countries and their perception of 'Western' products. Nonetheless, the Netherlands could be seen as a small country with relatively high levels of foreign trade, which could influence the manner at which we perceive foreign goods. Interestingly, R&D specialist of fruit and vegetable distributor Bakker Barendrecht has stated that Dutch consumers are not as concerned about the origin of their produce as consumers from other countries in which the company operates (S. Van der Werff, personal communication, 23rd January, 2020). Therefore, it would be interesting to conduct a similar study in other cultural contexts, in order to examine cross-cultural differences in portraying bias as an effect of cultural similarity.


### 7.3. Marketing Implications

Understanding the different components of home country bias and its different contributors provides opportunities for marketeers as well. The current study gives several insights that international business marketeers could put to practice when it comes to home country bias. By recognizing the importance of identity in marketing, marketeers could appeal to a consumer's affiliation with its national group when promoting products from the domestic

market, thereby enhancing home country bias. Conversely, those who market foreign products can highlight a country's cultural similarity to that of the target market, as high levels of cultural similarity were seen to appeal to both ethnocentric consumers and nationalistic consumers. In a broader sense, the current study demonstrates clearly the value of understanding country-of-origin effect and how it affects consumer perception and behaviour in an increasingly globalized market.

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| CONSTRUCT: | ITEMS: |
| --- | --- |
| **FR-SIM-STATEMENTS** | French culture is similar to Dutch culture. |
| | The French language is similar to the Dutch language. |
| | The French have the same norms and values as the Dutch. |
| | French history is related to Dutch history. |
| | The French and the Dutch resemble each other. |
| | The French people and the Dutch people are related to each other. |
| **ES-SIM-STATEMENTS** | Spanish culture is similar to Dutch culture. |
| | The Spanish language is similar to the Dutch language. |
| | The Spanish have the same norms and values as the Dutch. |
| | Spanish history is related to Dutch history. |
| | The Spanish and the Dutch resemble each other. |
| | The Spanish people and the Dutch people are related to each other. |
| **MA-SIM-STATEMENTS** | Moroccan culture is similar to Dutch culture. |
| | The Moroccan language is similar to the Dutch language. |
| | The Moroccan have the same norms and values as the Dutch. |
| | Moroccan history is related to Dutch history. |
| | The Moroccan and the Dutch resemble each other. |
| | The Moroccan people and the Dutch people are related to each other. |
| **FR-SIM-SCORE** | Give a score between 0-10 how culturally similar France is to the Netherlands (0 being 'Completely different' and 10 being 'Completely similar'). |

| | |
|---|---|
| **ES-SIM-SCORE** | Give a score between 0-10 how culturally similar Spain is to the Netherlands (0 being 'Completely different' and 10 being 'Completely similar'). |
| **ES-SIM-SCORE** | Give a score between 0-10 how culturally similar Morocco is to the Netherlands (0 being 'Completely different' and 10 being 'Completely similar'). |
| **Arguments to buy domestic** | "We would like to know more about reasons why consumers would prefer a Dutch product over a foreign alternative. What would be a reason for you to prefer a Dutch product over a foreign alternative? You are free to give multiple reasons." |

| CONSTRUCT: | ITEMS: |
|---|---|
| **NL-EVAL** | Tomatoes from the Netherlands are good. |
| | Tomatoes from the Netherlands are tasty. |
| | Tomatoes from the Netherlands are aromatic. |
| | Tomatoes from the Netherlands keep well. |
| | Tomatoes from the Netherlands are appealing. |
| | Tomatoes from the Netherlands are safe to eat. |
| | Tomatoes from the Netherlands are healthy. |
| **NL-EXP** | I have seen tomatoes from the Netherlands in store. |
| | I have eaten tomatoes from the Netherlands before. |
| **FR-EVAL** | Tomatoes from France are good. |
| | Tomatoes from France are tasty. |
| | Tomatoes from France are aromatic. |
| | Tomatoes from France keep well. |
| | Tomatoes from France are appealing. |
| | Tomatoes from France are safe to eat. |
| | Tomatoes from France are healthy. |
| **FR-EXP** | I have seen tomatoes from France in store. |
| | I have eaten tomatoes from France before. |
| **ES-EVAL** | Tomatoes from Spain are good. |
| | Tomatoes from Spain are tasty. |
| | Tomatoes from Spain are aromatic. |

| | |
|---|---|
| | Tomatoes from Spain keep well. |
| | Tomatoes from Spain are appealing. |
| | Tomatoes from Spain are safe to eat. |
| | Tomatoes from Spain are healthy. |
| **ES-EXP** | I have seen tomatoes from Spain in store. |
| | I have eaten tomatoes from Spain before. |
| **MA-EVAL** | Tomatoes from Morocco are good. |
| | Tomatoes from Morocco are tasty. |
| | Tomatoes from Morocco are aromatic. |
| | Tomatoes from Morocco keep well. |
| | Tomatoes from Morocco are appealing. |
| | Tomatoes from Morocco are safe to eat. |
| | Tomatoes from Morocco are healthy. |
| **MA-EXP** | I have seen tomatoes from Morocco in store. |
| | I have eaten tomatoes from Morocco before. |
| **PREF** | I prefer tomatoes from: The Netherlands / France / Spain / Morocco |
| **NI** | I am proud to be Dutch. |
| | Being Dutch is not important to me (recoded). |
| | I don't like it when someone has a negative opinion about the Netherlands. |
| | I don't feel any ties with the Netherlands (recoded). |
| | Being Dutch means a lot to me. |
| **CE** | Dutch people should not buy foreign products, because this hurts Dutch business. |

|  | It is not right to purchase foreign products, because this puts Dutch people out of jobs. |
|---|---|
|  | A real Dutchman should always buy Dutch products. |
|  | I always prefer Dutch products over foreign products. |
|  | We should purchase products manufactured in the Netherlands, instead of letting other countries get rich off us. |
| **Familiarity with France** | I have visited France before. |
|  | I have relatives in/from France. |
|  | I follow French media. |
|  | I like French movies, music and/or books. |
| **Familiarity with Spain** | I have visited Spain before. |
|  | I have relatives in/from Spain. |
|  | I follow Spanish media. |
|  | I like Spanish movies, music and/or books. |
| **Familiarity with Morocco** | I have visited Morocco before. |
|  | I have relatives in/from Morocco. |
|  | I follow Moroccan media. |
|  | I like Moroccan movies, music and/or books. |
| **Arguments to buy domestic** | Because I want to support the domestic economy. |
|  | Because the domestic product is of better quality. |
|  | Because the domestic product is more sustainable. |
|  | Because the domestic product is cheaper. |
|  | Other: … |

**Table 10. Mediated Regression Analysis of the Difference between the Netherlands-France.**

|  | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.300* | 0.365* | 0.448* | 55.1% |
| National Identification | 0.044 | 0.118 | - | - |
| Interaction | 0.055 | -0.070 | - | - |
| DIF-EVAL | - | 1.490* | - | - |
| $R^2$ | 0.277 | 0.432 | - | - |

*Significant at $p < 0.05$

**Table 11. Mediated Regression Analysis of the Difference between the Netherlands-Spain.**

|  | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.324* | 0.508* | 0.645* | 55.9% |
| National Identification | 0.120 | -0.033 | - | - |
| Interaction | 0.011 | -0.123 | - | - |
| DIF-EVAL | - | 1.987* | - | - |
| $R^2$ | 0.268 | 0.467 | - | - |

*Significant at $p < 0.05$

**Table 12. Mediated Regression Analysis of the Difference between the Netherlands-Morocco.**

|  | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|

| | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.422* | 0.622* | 0.591* | 48.7% |
| National Identification | 0.031 | 0.035 | - | - |
| Interaction | -0.001 | -0.142 | - | - |
| DIF-EVAL | - | 1.400* | - | - |
| $R^2$ | 0.260 | 0.370 | - | - |

*Significant at $p < 0.05$

**Table 13. Mediated Regression Analysis of the Difference between France-Spain.**

| | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.036 | 0.223 | - | - |
| National Identification | 0.075 | -0.105 | - | - |
| Interaction | -0.055 | 0.001 | - | - |
| DIF-EVAL | - | 1.752* | - | - |
| $R^2$ | 0.071 | 0.276 | - | - |

*Significant at $p < 0.05$

**Table 14. Mediated Regression Analysis of the Difference between France-Morocco.**

| | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.114* | 0.150 | - | - |
| National Identification | -0.010 | -0.072 | - | - |
| Interaction | -0.060 | -0.086 | - | - |
| DIF-EVAL | - | 1.667* | - | - |

| | | |
|---|---|---|
| $R^2$ | 0.105 | 0.262 | - | - |

*Significant at p < 0.05

**Table 15. Mediated Regression Analysis of the Difference between Spain-Morocco.**

| | DIF-EVAL | DIF-PREF (direct) | DIF-PREF (mediated) | % of total effect mediated |
|---|---|---|---|---|
| Consumer Ethnocentrism | 0.067 | -0.113 | - | - |
| National Identification | -0.085 | 0.010 | - | - |
| Interaction | -0.006 | -0.042 | - | - |
| DIF-EVAL | - | 1.345* | - | - |
| $R^2$ | 0.021 | 0.194 | - | - |

*Significant at p < 0.05