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## **Inconsistencies in the behavioural effects of consumer ethnocentrism: The role of brand, product category, and country of origin**

### **ABSTRACT**

**Purpose** – Despite the well-established impact of consumer ethnocentrism (CET) on purchase intentions, extant literature offers limited evidence on actual purchase behaviour. This study addresses this gap by investigating the factors underlying variations in consumer ethnocentric behaviour using reported brand purchases. Product category, product cost and visibility, brand and country of origin of purchased products are investigated for their impact on the differences in the behavioural effects of CET.

**Design/methodology/approach** – This study uses survey data collected in the United States from a sample of 468 consumers. Self-reported brand purchases are used and involve 10 product categories, 432 brands, and 22 countries of origin. Logistic regressions for repeated measures are used to test the hypotheses formulated.

**Findings** – The results confirm that product category is an important determinant of the behavioural effects of CET. CET also has a significant impact on purchases of the most expensive product categories rather than frequently purchased convenient items. Contrary to existing empirical evidence, cultural similarity does not mitigate the negative effects of CET and product visibility does not strengthen the behavioural effect of CET.

**Practical implications** – The study results should enhance managers' understanding of the determinants of ethnocentric behaviour. The results caution managers about the value of self-reported measures and indicate that product features other than country of origin may be more effective in mitigating the negative effects of CET.

**Originality/value** – This study contributes to extant literature on CET and country of origin by investigating, for the first time, the problem of inconsistent predictions of purchase

behaviour in the context of foreign versus domestic brands. For this purpose, the study adopted a novel methodological approach to investigate actual brand purchases.

**Keywords:** consumer ethnocentrism, country of origin, global brands, product category

**Paper type:** Research paper

## INTRODUCTION

The economic downturn in Europe, the United States, and many developing countries has heightened the need to protect local jobs and economies. The economic crisis has revived consumers' ethnocentric tendencies at the expense of foreign products. Consequently, consumer ethnocentrism (CET), a concept Shimp and Sharma introduced in 1987 to explain the biased preference for domestic products at the expense of foreign alternatives, has become more relevant than ever before. Indeed, protectionist measures seem to be on the rise, as countries try to shield their industries from foreign competition (Chaffin, 2012). CET is a predisposition and encompasses strong moral elements, in that consumers perceive purchasing domestic products as their moral duty to their country (Shimp and Sharma, 1987). Extant research confirms that increases in perceived threat, such as any economic crisis, can result in heightened levels of CET (Festervand and Sokoya, 1994; Lee *et al.*, 2003; Olsen *et al.*, 1993; Sharma *et al.*, 1995; Witkowski, 1998). In the same vein, relevant research views CET as a deeply rooted, tenacious type of non-tariff barrier (Shimp and Sharma, 1987) that may defy economic policy and trading agreements. A key question that remains unanswered, however, is whether all foreign products suffer equally from exacerbated CET or whether some products suffer more than others. The same question in reverse applies to domestic products—do all domestic products benefit equally from CET?

Ample research has attested to the value of CET as a construct, highlighting its impact on attitudes (Alden *et al.*, 2006; Kaynak and Kara, 2002; Kim and Pysarchik, 2000; Sharma *et al.*, 1995; Suh and Kwon, 2002; Watson and Wright 2000), product evaluations (Durvasula *et al.*, 1997; Poon *et al.*, 2010; Sharma *et al.*, 1995; Shimp and Sharma, 1987; Verlegh, 2007; Wang and Chen, 2004), and purchase intentions (Good and Huddleston, 1995; Shimp and Sharma, 1987; Wang and Chen, 2004). However, research on how CET affects actual or

reported purchase behaviour is scarce (Witkowski, 1998; Yu and Albaum, 2002). In addition, much of the CET research focuses on aggregate measures of behaviour (e.g., attitudes towards foreign products in general) rather than specific outcomes (e.g., purchase of specific brands). The limited empirical evidence implies that CET does not have a uniform effect on consumer purchase behaviour. For example, Klein *et al.* (1998) and Suh and Kwon (2002) show that while highly ethnocentric consumers are negatively biased against the purchase of foreign products in general, brand effects can mitigate such ethnocentric bias (Steenkamp *et al.*, 2003).

This paper addresses these gaps by investigating the variations in ethnocentric behaviours and the factors underlying such variations. In particular, our study examines brand, product, and country-of-origin (COO) effects for their impact on behavioural ethnocentric bias. Contrary to the main stream of CET research, which concentrates on general attitudes towards products or buying intentions, this research focuses on behavioural outcomes of CET. Furthermore, it adopts a more focused approach and examines the impact of CET on the purchase of specific brands, rather than the impact of CET on a general product categorisation or simple foreign–domestic product dichotomies.

The paper opens with a literature review on CET and discusses the factors that play an important role in CET behavioural outcomes, which leads to the development of a set of testable hypotheses. Next, we provide an explanation of the methodology adopted to test the hypotheses and present the results of the statistical analyses. Finally, we draw some conclusions and discuss the managerial implications.

## LITERATURE REVIEW

### *CET conceptualisation*

Shimp and Sharma (1987, p. 280) define CET as “the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign-made products.” Sharma *et al.* (1995, p. 27) provide greater clarity on the conceptualisation of CET by arguing that it is a “trait-like property of individuals’ personalities,” which highlights the pervasive nature of ethnocentrism. The definition of CET as a trait (as opposed to an attitude) suggests that it is a general consumer disposition that is not affected by specific products or situations.

Indeed, Shimp and Sharma’s (1987) initial conceptualisation emphasises the non-directional aspect of CET and suggests that, contrary to attitudes, CET is a general “societal tendency.” Although attitudes have much in common with tendencies, they have an evaluative character and directly refer to an attitude object (e.g., a product or a brand in this case). In the context of CET, the use of the term “tendency” conveys that ethnocentric tendencies are more durable and stable than attitudes (Eagly and Chaiken, 1993). To distinguish between the general and the specific, general disposition measures, such as the CETSCALE used to measure CET, are directed to general stimuli, such as domestic or foreign products in general rather than specific brands (Fishbein and Ajzen, 2005). Conversely, specific attitudes are directed to specific behaviours with respect to an attitude object (the product/brand) or expression of the attitude (e.g., buying foreign brands). Later work on the concept of CET shows that this general tendency encapsulates a negative affective, cognitive, and behavioural response to foreign products and a positive one to domestic products (Sharma, 2015; Vida and Reardon, 2008).

Despite evidence showing the impact of CET on attitudes and behaviours towards foreign and competitive domestic products (e.g., Sharma *et al.*, 1995), most research focuses on predicting attitudes and buying intentions, thus failing to adequately address purchase behaviour. Furthermore, the majority of the studies concentrate on different forms of aggregate measures rather than specific outcomes (e.g., purchase of a specific brand). For example, empirical research has examined the effects of CET on the evaluations of foreign and domestic products (Durvasula *et al.*, 1997; Huddleston *et al.*, 2001; Poon *et al.*, 2010; Sharma *et al.*, 1995; Shimp and Sharma, 1987; Verlegh, 2007; Wang and Chen, 2004; Zeugner-Roth *et al.*, 2015), brand affect (Lee and Mazodier, 2015), willingness to purchase foreign or domestic products (Kwak *et al.*, 2006; Ranjbarian *et al.*, 2010; Verlegh, 2007; Wang and Chen, 2004; Zarkada-Fraser and Fraser, 2002), and preferences (Balabanis and Diamantopoulos, 2004; Kesić *et al.*, 2004; Ranjbarian *et al.*, 2010).

Investigation of mediators and moderators is also scarce and focuses on the same outcome variables—namely, attitudes and purchase intentions—rather than on actual purchase behaviour. Extant research in the area suggests, for example, that empathy towards the in-group mediates the relationship between CET and willingness to support domestic products (Olsen *et al.*, 1993). In addition to empathy, empirical evidence shows that product judgements mediate the relationship between CET and willingness to buy either domestic or foreign products (e.g., Zeugner-Roth *et al.*, 2015). Other scholars posit that CET is an antecedent of COO (e.g., Brodowsky, 1998; Orth and Firbasova, 2003; Samiee, 1994), suggesting that COO acts as a mediator in product evaluations or preferences. Despite some evidence on the role of mediators, research in this area

remains inconclusive, as scholars have failed to find a consistent pattern for the role of COO, particularly on purchase intentions (Shankarmahesh, 2006).

Some inconsistencies are also apparent in empirical research on moderators. For example, although research has found that perceived threat has a moderating effect (e.g., Sharma *et al.*, 1995), other research has treated salience, which encapsulates the perceived threat to domestic workers or industries and therefore is a similar term, as an antecedent of CET (Olsen *et al.*, 1993). Other moderators present in extant literature include perceived product necessity and cultural similarity. For products perceived as unnecessary, the impact of ethnocentric sentiments on attitudes is stronger (Huddleston *et al.*, 2001; Sharma *et al.*, 1995) because necessity tends to counteract the altruistic motives behind the consumption of domestic goods. Conversely, cultural similarity weakens the impact of CET on product evaluations (e.g., Watson and Wright, 2000) and preferences because consumers tend to view culturally similar countries as part of the in-group (Tajfel *et al.*, 1971).

Research on the effects of CET on specific behaviours remains scarce, revealing a research gap and creating an opportunity to theoretically and empirically examine the relationship between CET and behavioural outcomes and the factors that might moderate it. In general, findings in social psychology (Eagly and Chaiken, 1993; Fishbein and Ajzen, 2005) suggest that compared with measures of specific attitudes, general measures of predispositions (e.g., CET) are weakly related to specific responses or behaviours (e.g., buying or using a specific brand). Accordingly, general measures perform better in predicting aggregate behaviours (i.e., measures aggregating specific behaviours) rather than specific behaviours (Fishbein and Ajzen, 1974; Werner, 1978), such as buying a specific brand.

The variability in the predictive validity of different measures is well supported through 40 years' worth of research evidence. Empirical findings show that these differences are not related to the validity of measures (Ajzen and Fishbein, 2005), albeit general measures that are compatible with the specific behaviours they predict tend to display higher prediction rates for individual behaviours. In particular, general measures that focus on predispositions towards objects (in this case, predisposition towards foreign/domestic products) are less compatible than general measures that focus on predispositions towards actions or behaviours (in this case, predisposition towards purchasing foreign or domestic products) (Ajzen and Fishbein, 2005). The CETSCALE that measures CET (Shimp and Sharma, 1987) is considered compatible because all its items focus on predispositions towards purchasing foreign/domestic products (actions) rather than predispositions towards the products (objects).

Ajzen and Fishbein (2005) suggest that observed inconsistencies are due to the representativeness of the predictive behaviours. People with the same general dispositions may choose to express it in different ways. Thus, examining the effects on a series of domain-relevant behaviours rather than on a single specific behaviour can remove the atypicality and unrepresentativeness of individual behaviours (i.e., buying a specific brand). Individual behaviours tend to be influenced not only by a person's general predisposition but also by other factors. "By incorporating in our criterion measure a large number of behaviours relevant to the domain of interest, the influence of these additional factors is essentially eliminated" (Ajzen and Fishbein, 2005, p. 181). Thus, when examining issues of predication consistency of CET, it is appropriate to include a wide range of purchases across product categories and brands.

Ajzen and Fishbein (2005) argue that observed inconsistencies in the prediction rates of general measures could be explained through the identification of appropriate moderators. We thus adopt this approach herein in the empirical investigation of three moderators in the relationship between CET and buying behaviour.

## **HYPOTHESES DEVELOPMENT**

### *Consistency of CET across products*

Herche's (1992) work constitutes one of the few studies that test the impact of CET on buying behaviour and establish product variations in CET's prediction of buying behaviour. After controlling for demographics, Herche found that CET better predicts the ownership of domestic (vs. foreign) cars (with  $\Delta R^2 = 20\%$ ) than the ownership of domestic personal computers ( $\Delta R^2 = 5.4\%$ ). According to this research, the discrepancies in higher-priced products such as cars are more likely to activate ethnocentrism because of the size of the economic impact of the transaction on the local economy.

Thus, situational factors seem to affect CET, a notion that can be explained through the theory of "situational thresholds" or hurdles. Situational thresholds are a consequence of the psychological or physical costs involved when performing a certain behaviour (Campbell, 1963; Kaiser and Schultz, 2009). Consistent with this theory, the cost of performing a behaviour mitigates the effect of a general measure on behaviour. Campbell (1963) suggests that an acquired behavioural disposition affects both the general measure of the disposition and the overt behavioural response. The way the predisposition is expressed depends on certain situational pressures or thresholds.

This view is consistent with the low-cost hypothesis, which specifies that dispositions predict behaviour well in low-cost situations, in which the additional cost of performing a specific behaviour is marginal (Diekmann and Preisendörfer, 1998). Campbell's (1963) "situational threshold" in this case is lower when lower costs to undertake a particular behaviour are involved. Therefore, when costs to perform a behaviour are lower, general measures can predict the behaviour more accurately (Diekmann and Preisendörfer, 1998; Wallace *et al.*, 2005).

In addition to the economic cost, the costs associated with performing a particular behaviour may involve sacrifices in quality and prestige. Furthermore, Supphellen and Rittenburg (2001) argue that significant personal and social costs are involved in the purchase of domestic or foreign products. Every choice between a domestic and a foreign product involves weighing the costs, including the economic, social, and personal costs related most to conformity with the group (in this case, the nation). Following this stage, consumers will make decisions based on the net costs involved in the purchase of foreign products. Such costs need to be overcome for CET to manifest in a particular behaviour. Overcoming the costs is a function of the strength of the attitude (e.g., Byrka, 2009; Kaiser *et al.*, 2010). Thus, in the context of CET, the performance of a particular behaviour is jointly determined by the cost related to the realisation of the behaviour and the level of CET; the higher the level of CET, the greater is the probability that the cost barrier will be overcome and the behaviour will be performed. More costly purchases require higher levels of CET than less costly purchases. To be able to draw conclusion about CET, it is essential to systematically observe an array of specific purchasing behaviours.

While consumers automatically perform some behaviours without deliberation, other behaviours are under their volitional control and are intentionally performed to achieve certain goals (Ouellette and Wood, 1998). A goal is an internal representation of a desired state and, in many cases, may not be explicit and constantly accessible to conscious awareness. For example, some superordinate goals fulfilled by CET, such as the need for inclusion and assimilation and the need for security, may be completely conscious and accessible. Highly ethnocentric consumers, whose goal is to protect the local economy and local employment from the invasion of foreign firms, try to meet this goal by purchasing everyday convenience, low economic cost items. Such purchases, however, do not necessarily lie in the conscious awareness sphere of the consumer; rather, these items are habitually purchased with little deliberation (Ahmed *et al.*, 2004). Empirical research suggests that the domestic origin of the product becomes a more important consideration in buying decisions in the context of more expensive products (Li and Wyer, 1994). Consumers within these contexts are more motivated to collect information about the product and consequently engage in a more reflective process. Evidence suggests that even ethnocentric consumers need to show accountability and identify reasons for their preference for domestic products (Tetlock *et al.*, 1989). The more expensive a product is, the stronger are the reasons behind the purchase of domestic products because the impact on the economy is greater in this case.

In contrast, when focusing on the social costs involved, consumers experience a great deal of normative pressure, which forces them to comply with existing norms. In the context of consumer behaviour, Bourne (1957) suggests that consumers feel greater pressure in the case of publicly consumed products. Empirical evidence corroborates this finding and highlights the need to acknowledge the situational factor of social or product visibility as an important

determinant of normative influence (e.g., Batra *et al.*, 2001; Bearden and Etzel, 1982).

According to literature in the sociology domain, ethnocentric tendencies are associated with conformity (Catton, 1960), as in-group members strive to enhance their social identity. Thus, normative pressures reinforce ethnocentrism, particularly when the product or the consumption is socially visible. From this discussion, we hypothesise the following:

H<sub>1</sub>: CET exerts a stronger effect on the purchase of (a) brands from more expensive product categories than less expensive product categories, and (b) socially visible products than privately consumed products.

#### *Consistency of CET across brands*

Ethnocentric consumers are more concerned with the foreignness of products in general and less so with the specific countries from which products originate. However, globalisation and the relocation of manufacturing have blurred the domestic–foreign distinction. Many products perceived as domestic are actually produced in foreign locations. Conversely, many foreign products are produced domestically.

Research suggests that consumers lump COO together with other extrinsic cues about a brand (Han, 1989; Jacoby *et al.*, 1971). The brand name may be “a more powerful summary construct” than the (foreign/domestic) origin of the brand (Han, 1989, p. 223). As a result, for well-established brands, extrinsic cues such as price or COO lose their diagnostic usefulness (and predictive ability). Accordingly, the brand can mitigate or enhance any COO effect, depending on the country associations attached to the brand. Because COO is an important cue to separate domestic from foreign products, the brand should have a differential ability in activating ethnocentric tendencies. Similar to COO effects, which suggest that country information availability activates cognitive processing and evaluation (Hong and Wyer,

1989), CET is activated when foreign or global brands are compared with local alternatives. In this case, brands closely linked to the homeland should evoke stronger effects than brands with weaker homeland associations. Steenkamp *et al.* (2003) argue that ethnocentric consumers are more likely to pay attention to global (foreign) brands because they are more visible and pose a higher threat to the national economy than non-global brands. In addition, other individual characteristics of ethnocentric consumers, such as lower levels of cosmopolitanism and openness to foreign cultures, make global brands less attractive. Empirical research in the United States and South Korea corroborates this relationship at a purchase intention level, indicating that ethnocentric consumers are less likely to buy global brands (Steenkamp *et al.*, 2003). This tendency can also be explained through consumers' global–local identity. Ethnocentric consumers tend to prefer global brands less because such brands are less accessible to and incongruent with their local identities (Swoboda *et al.*, 2012; Zhang and Khare, 2009). Thus, because global brands are more likely to be perceived as greater economic and cultural threats to a home country and are less congruent with the identities of ethnocentric consumers, they are more likely to receive higher levels of ethnocentric bias. As a result, we hypothesise the following:

H<sub>2</sub>: CET exerts a stronger effect on the purchase of global than local brands.

#### *Consistency of CET across countries*

Watson and Wright (2000) have found a moderating effect of cultural similarity of foreign products' COO on the relationship between CET and product evaluations in New Zealand, and Ma *et al.* (2012) found the same effect on willingness to buy foreign products in China. Empirical evidence shows that cultural proximity weakens the adverse effects of CET on foreign products. This is due to social categorisation, a process by which members of the in-

group and out-group are identified (Tajfel *et al.*, 1971). Attributes that are assessed and constitute categorisation criteria include physical, social, and self dimensions. As Hogg and Terry (2000) argue, people adhere to the stereotypical attributes of groups in the form of prototypes, which consist of attributes that define groups and differentiate them from other groups, including feelings, beliefs, and attitudes. Insofar as culture encompasses one group's beliefs, it constitutes a basis for social categorisation and in-group and out-group identification. Cultures or nations that share similar characteristics (e.g., beliefs, feelings, attitudes) can therefore be treated as one group. Simply put, cultural similarity can encourage people or nations to perceive other nations as in-group members and therefore as favoured over out-groups (Tajfel *et al.*, 1971). Conversely, culturally distant countries are perceived as more foreign than culturally similar ones and thus are more likely to trigger ethnocentric dispositions. Empirical evidence provides strong support for the moderating role of cultural similarity in the relationship between CET and buying intentions (Lantz and Loeb, 1999; Watson and Wright, 2000). Thus:

H<sub>3</sub>: The negative effects of consumer ethnocentrism are weaker when it comes to the purchase of foreign brands coming from culturally close countries.

## **METHODOLOGY**

Data was collected using consumer panels in the United States. We launched an online survey and received 555 completed questionnaires, 468 of which were usable after screening out cases with excessive missing data and non-US respondents. In the sample, 43.3% were women, 26% had a graduate degree, and the average age was between ages 20 and 44 years (Table I).

[Insert Table I Here]

We used the 17-item CETSCALE to measure CET on a 7-point Likert scale. Confirmatory factor analysis was performed to assess the psychometric properties of the scale. The trimmed scale that emerged from the fitting process had acceptable fit ( $\chi^2(20) = 202.098, p < .01$ ; GFI = .91; CFI = .96; NFI = .96; RMSEA = .12). Cronbach's alpha was .96, reliability rho = .91, and AVE = .55.

To test the hypotheses, we selected a naturalistic measurement approach. Respondents were asked to indicate what brands they bought recently (for durable products) or usually buy (for non-durable products) in 10 product categories (i.e., cars, refrigerators, washing machines, cell phones, cameras, laptops, casual clothing, sport shoes, beer, and coffee). Respondents were instructed to write down as many brands they own or had owned in the past as they could recollect. A tabulation of responses yielded a set of 432 brands in all 10 product categories (i.e., 32 car brands, 25 refrigerator brands, 23 washing machine brands, 21 camera brands, 13 cell phone brands, 19 laptop brands, 111 casual clothing brands, 51 sports shoe brands, 75 beer brands, and 62 coffee brands).

We then classified brands according to their COO. The identified foreign brands originated from 22 different countries. With the use of Kogut and Singh's (1988) formula, we calculated the cultural distance of each country from the United States to test H<sub>3</sub>. The next step involved classifying brands into local and global categories according to their presence in international markets. Using information from their websites, we identified 159 of the 432 brands in the study as having a global presence. For the global car brands, we used the 2008 transnationality index, a widely used measure developed by the United Nations Conference on Trade and Development (1998), to assess the degree of globalness for each brand. The index is estimated as the average score of the following three ratios: (1) the ratio of foreign

assets to total assets, (2) the ratio of foreign sales to total sales, and (3) the ratio of foreign employment to total employment. While most studies focus on perceived measures of brand globalness, the current study focuses on an objective measure. Perceptions of the globalness of a brand do not necessarily coincide with objective globalness, as many companies may purposefully try to provide a global aura to their brands beyond the real levels of globalisation. Thus, we used the transnationality index in a supplementary analysis in support of H<sub>2</sub>. An index score was not available for the brands in the other product categories.

We coded and transformed identified brands into binary dummy variables (1 = owned, 0 = not owned) to be able to use logistic regression for repeated measures with the method of generalised estimating equations (Liang and Zeger, 1986). This method is particularly useful and appropriate in this case (in which we have repeated brand purchase/no purchase binary data) because it allows repeated correlated binary variables to be robustly analysed. To determine the best correlation structure, we employed the lowest value of the quasi-likelihood under independence model criterion (QIC).

We added only foreign brands to the analysis of logistic regression for repeated measures to test H<sub>2</sub> and H<sub>3</sub>. To avoid confounding effects, we included demographic variables (gender, age, education, income, and ethnicity) in the analysis.

## **FINDINGS**

The QIC and the corrected QIC criteria indicated that the independent correlation matrix structure provides the best fit, and therefore we used that structure for the model. The results provide support for H<sub>1</sub>; with regards to domestic bias, the interaction between product category and the CETSCALE is statistically significant (Table II). An examination of the

repeated logistic regression parameters in Table III reveals that CETSCALE interacts with washing machines, cell phones, laptops, and clothing but not with coffee (a low-cost convenience item used as a reference category). A strong direct effect of product category has been found, which indicates high variation in the purchase of domestic brands across product categories. Figure I plots the predicted mean responses for the different products at different levels of CET. As the figure shows, the probability of purchasing a domestic brand increases with the level of CET for washing machines, laptops, and cell phones. CET does not exert any effects on lower-price items, such as beer, coffee, shoes, and clothing; conversely, CETSCALE effects are evident in most of the higher-cost items. These findings provide partial support for H<sub>1a</sub>, though two of the products (i.e., cars and cameras) are not influenced by CET. The findings do not provide support for H<sub>1b</sub>; increases in the CET do not affect the purchase of domestic brands for publicly used categories, such as cars, shoes, and clothing.

[Insert Tables II and III Here]

[Insert Figure I Here]

Overall, H<sub>2</sub> is not supported; there is no significant interaction effects of CET on the globalness of the brand ( $p = .614$ ). CET seems to equally affect both global and local US brands. However, for car brands only (for which a graded transnationality measure was available), we find a weak interaction effect of the transnationality of a brand on CET, providing partial support for H<sub>2</sub>. For the purchase of domestic car brands, we find interaction effects of CET on the transnationality index (Wald's  $\chi^2(1) = 5.510, p = .019$ ). The same statistic for the purchase of foreign brands is non-significant (Wald's  $\chi^2(1) = .187, p = .666$ ). It appears that the level of globalness of foreign brands sold in the United States is not a concern for ethnocentric US consumers in terms of purchase. However, the same is not true for US (domestic) brands, as their level of transnationality and how much of their production

and labour is located abroad affect ethnocentric US consumers' purchases. To explore the interaction effect further, we trichotomised the transnationality index into three levels (low, medium, and high) and plotted the predicted mean responses of the logistic regression against the CETSCALE. The results in Figure II suggest that as transnationality of car brands increases, consumers at the high end of the CETSCALE range are less likely to buy such brands. The drop for the high transnationality brands is higher than that for the less transnational brands (e.g., medium and low transnationality groups of US car brands). Thus, the movement of assets and labour abroad affects a small group of hard-core ethnocentric US consumers (i.e., those scoring very high on the CETSCALE)

Additional results in Table II indicate a significant direct effect of brand globalness on the purchasing of domestic brands. Evidently, consumers (regardless of their CET levels) buy more global US brands than local alternatives.

[Insert Figure II Here]

The results in Table IV confirm  $H_1$  for foreign brand purchases, highlighting a significant interaction effect of CET on products. More specifically, CET exerts stronger negative effects on the purchase of expensive products than the reference category (coffee). As Table V shows, CETSCALE interacts with all product categories except beer, which together with coffee, is the lowest-cost product. CET does not exert any effect on the purchase of foreign brands of clothing. The plot in Figure III shows that CET is negatively related to the expensive items, such as cars, refrigerators, and washing machines. The opposite effect occurs for electronic products (cell phones, laptops, and camera), for which South Asian firms dominate the US market. This phenomenon deserves further exploration. Thus, again,  $H_{1a}$  is partially supported in terms of an ethnocentric bias against foreign products.

Conversely, the findings do not provide support for H<sub>1b</sub>, as high-cost publicly consumed products (e.g., cars) are as equally affected by CET as privately consumed goods (e.g., washing machines, refrigerators). CET also does not affect low-cost publicly consumed products, such as clothing.

[Insert Table IV Here]

[Insert Table V Here]

[Insert Figure III Here]

H<sub>3</sub> is not supported, as we observe no interaction effect of CET on cultural distance of the brand's COO (Table IV). Our results suggest that purchases of brands from culturally distant countries do not suffer more from CET than brand purchases from culturally closer countries.

## **DISCUSSION**

The findings provide several valuable insights into the scarcely researched area of the behavioural consequences of CET. This article is the first to explore the effects in a non-experimental setting through a series of reported brand purchases. In particular, we examined four moderators of the relationship between CET and reported brand purchases: products' economic cost level, product visibility, globalness of the brand, and cultural similarity of the brand's COO.

The effects of CET are not uniform across products. CET does not affect the purchase of less expensive, convenience products. However, within this category of products, consumers buy more domestic than foreign products, though CET does not affect their behaviour. This result corroborates Li and Wyer's (1994) and Ahmed *et al.*'s (2004) findings, which establish that the origin of the product is only relevant in buying decisions when it comes to high-

involvement products (e.g., products that include high economic costs). Low-involvement products do not provide sufficient motivation for consumers to collect more information about and reflect on them. As the specific purchases are low-involvement goods, associated with little deliberation, it is likely that some implicit ethnocentric attitudes are automatically activated. In line with the theory of spreading activation, consumers exposed to foreign products will automatically recall information stored in long-term memory and evaluate the given stimulus without any conscious deliberation (MacDonald, 2006). Empirical research on implicit measures reveals the existence of implicit ethnocentrism and highlight large discrepancies between self-reported CET (as it was measured in this study) and implicit CET (Braun and Zaltman, 2002; Cunningham *et al.*, 2004; Maison *et al.*, 2004).

CET seems to be more relevant for high-cost foreign products, with the exception of electronics brands. However, global domestic brands do not attract more ethnocentric attention than non-global domestic brands. Although evidence highlights the moderating role of CET in the relationship between perceived globalness and perceived brand quality (Akram *et al.*, 2011), the relationship to brand purchase behaviour has not been addressed until now. The non-significant role of perceived global brands' COO might be explained through the global appeal of these brands. Global brands are unique in their ability to appeal to multi-cultural audiences because of the use of marketing communications that revolve around a modern urban lifestyle (Alden *et al.*, 1999), thus mitigating the impact of CET because belonging to a larger, more unified group (i.e., the world) becomes more important. In addition, the United States is the COO for an increased number of top global brands (Interbrand, 2014), suggesting a more positive attitude of US consumers towards global brands in general.

Preliminary evidence also suggests that ethnocentric consumers do not perceive global domestic brands as more domestic than non-global brands. However, this evidence is limited because it pertains only to one product category—namely, cars, which are in a high-cost product group. We focused on cars for methodological reasons and, more specifically, because the graded levels of globalness (transnationality index) were only available for the car product category. The predicted effects of globalness observed are small and thus require further examination.

Contrary to our expectations, we did not observe a granular version of a brand's foreignness based on the cultural similarity between the domestic (US) and the foreign COO. Rather, CET did not have a mitigating effect on the purchases of foreign brands coming from culturally similar countries. Consequently, cultural similarity does not moderate the CET–buying behaviour relationship. Although this finding contradicts prior research that highlights the role of cultural similarity in mitigating the negative effects of CET (Lantz and Loeb, 1996; Watson and Wright, 2000), it is consistent with the basic principle of CET as a tendency involving a two-way categorisation of products (i.e., domestic and foreign). According to CET, cultural similarity does not constitute an evaluation criterion, because consumers only consider the foreign or domestic origin of the product or brand. Consumers seem to be more concerned with the impact of their purchase behaviour on the domestic economy rather than the psychic distance of the markets. The impact of the economic crisis at the micro-level (i.e., the individual consumer) is very strong, as consumers feel more threatened, due to the increased difficulties they have experienced from the crisis. As a consequence, ethnocentric consumers, who feel more threat than others, tend to increase their group cohesion (Grant, 1993) and intensify their efforts to defend their in-group (Bizumic *et*

*al.*, 2009). Therefore, the impact of other factors, such as cultural similarity, becomes irrelevant as consumers base their group categorisations on strictly national borders.

## **CONCLUSION, IMPLICATIONS, AND LIMITATIONS**

This study explores the issue of CET's inconsistent predictions of purchasing behaviour in an extensive set of product categories (10 product categories) involving 432 brands and 22 different countries of origin. Our study contributes to existing literature on CET and COO by adopting an innovative methodological approach that investigates actual brand purchases.

This research also constitutes a more systematic effort to explain variations in the behavioural effects of CET because it investigates four different factors: COO, branding, and product visibility and product cost.

Our results suggest that CET does not exert any important effect on the purchases of convenience or low-cost products. As many of these product categories are bought habitually through automatic information processing, self-reported ethnocentrism is of little value in this context. In addition, as the majority of purchases of such items involve domestic brands, it is plausible to assume that implicit ethnocentrism internalised into habitual buying processes may be more appropriate for those categories. For the most expensive products, for which deliberation is involved before purchase and absolute price differentials between foreign and domestic products are higher (monetary sacrifice is involved), self-reported CET is relevant. These results should caution marketers in terms of the trust they put in self-reported CET measures. With regards to sales, self-reported CET is not important for all product categories. Organisations can benefit more from customer relationship management programmes that

allow them to track recent purchases and to understand buying habits particularly for low-cost, convenience products.

Empirical evidence from this study also reveals that cultural similarity is irrelevant in the purchase of global versus local brands. Specifically, cultural similarity does not mitigate the negative effects of CET. Therefore, managers need to acknowledge the limited value of emphasising COO and should instead concentrate their efforts on other product features that might mitigate the effects of CET, such as price and brand familiarity.

The study provides evidence from one economically advanced country, namely, the United States. Although CET was originally conceptualised and operationalised in this context, additional research should examine contextual effects pertaining to the home country and its market structure. In less economically advanced markets, it is likely that the underlying factors behind the relationships examined can better elucidate the behavioural effects of CET. Similarly, as mentioned previously, the United States is the COO for an increasing number of global brands. Thus, further research should also investigate the relationship between CET and the purchase of global brands in countries that have less global alternatives originating from them, as availability issues might have had an impact on the willingness to buy global versus local brands. In a similar manner, future research might look into the effects of subjective perceptions of globalness, in that consumers base their judgements and purchase decisions on (accurate or less accurate) information they hold about specific brands. In addition, this study examined actual purchase behaviour, using ownership, but does not assess consumers' awareness of the countries of origin of the owned brands. Further research could test perceived COO to clearly depict behavioural outcomes associated with CET. This study focused on four factors that determine actual purchase behaviour as a result of CET.

Additional research should try to address more factors that might shape ethnocentric behaviour, including domestic product/brand availability, perceived product necessity, perceived vulnerability of different products, and the level of economic development of the purchased brands' COO.

## REFERENCES

- Ahmed, Z. U., Johnson, J. P., Yang, X., Fatt, C. K., Teng, H. S., and Boon, L. C. (2004), "Does country of origin matter for low-involvement products?" *International Marketing Review*, Vol. 21 No. 1, pp. 102-120.
- Ajzen, I., and Fishbein, M. (2005), "The influence of attitudes on behavior", in Albarracín, D., Johnson, B. T., and Zanna, M. P. (Eds.), *The Handbook of Attitudes*, Erlbaum, Mahwah, NJ, pp. 173-221.
- Akram, A., Merunka, D., and Shakaib Akram, M. (2011), "Perceived brand globalness in emerging markets and the moderating role of consumer ethnocentrism", *International Journal of Emerging Markets*, Vol. 6 No. 4, pp. 291-303.
- Alden, D. L., Steenkamp, J. B. E., and Batra, R. (1999), "Brand positioning through advertising in Asia, North America, and Europe: the role of global consumer culture", *Journal of Marketing*, Vol. 63 No. 1, pp. 75-87.
- Balabanis, G., and Diamantopoulos, A. (2004), "Domestic country bias, country-of-origin effects, and consumer ethnocentrism: a multidimensional unfolding approach", *Journal of the Academy of Marketing Science*, Vol. 32 No. 1, pp. 80-95.
- Batra, R., Homer, P. M., and Kahle, L. R. (2001), "Values, susceptibility to normative influence, and attribute importance weights: a nomological analysis", *Journal of Consumer Psychology*, Vol. 11 No. 2, pp. 115-128.
- Bearden, W. O., and Etzel, M. J. (1982), "Reference group influence on product and brand purchase decisions", *Journal of Consumer Research*, Vol. 9 No. 2, pp. 183-194.
- Bizumic, B., Duckitt, J., Popadic, D., Dru, V., and Krauss S. (2009), "A cross-cultural investigation into a reconceptualization of ethnocentrism", *European Journal of Social Psychology*, Vol. 39 No. 6, pp. 871-99.

- Bourne, F. S. (1957), "Group Influence in Marketing and Public Relations", in Likert R. and Hayes, S. P., Jr. (Eds.), *Some Applications of Behavioral Research*, UNESCO, Basil, Switzerland, pp. 207-257.
- Braun, K. and Zaltman, G. (2002), "When what consumers say isn't what they do: the case of ethnocentrism", in Broniarczyk, S. M. and Nakamoto, K. (Eds.), *Advances in Consumer Research*, Vol. 29, Association for Consumer Research, Valdosta, GA, pp. 498-499
- Brodowsky, G. H. (1998), "The effects of country of design and country of assembly on evaluative beliefs about automobiles and attitudes toward buying them: a comparison between low and high ethnocentric consumers", *Journal of International Consumer Marketing*, Vol 10 No 3,, pp. 85-113.
- Byrka, K. (2009), "Attitude-behaviour consistency: Campbell's paradigm in environmental and health domains", doctoral dissertation, Technische Universiteit Eindhoven.
- Campbell, D.T. (1963), "Social attitudes and other acquired behavioural dispositions", in Koch, S. (Ed), *Psychology: A Study of a Science*, Vol. 6, McGraw Hill, New York, pp. 94-172.
- Catton, W. R. (1960), "The functions and dysfunctions of ethnocentrism: A theory". *Social Problems*, 201-211.
- Chaffin, J. (2012), "Large rise in protectionist measures", *Financial Times*, available at <http://www.ft.com/intl/cms/s/0/48bf7b6e-afdf-11e1-a025-00144feabdc0.html#axzz2xuEvih5W> (accessed 2 November 2015).
- Cunningham, W. A., Nezlek, J. B., and Banaji, M. R. (2004), "Implicit and explicit ethnocentrism: revisiting the ideologies of prejudice", *Personality and Social Psychology Bulletin*, Vol. 30 No. 10, pp. 1332-1346.

- Diekmann, A., and Preisendörfer, P. (1998), "Environmental behavior discrepancies between aspirations and reality", *Rationality and society*, Vol. 10 No. 1, pp. 79-102.
- Durvasula, S., Andrews, J. C., and Netemeyer, R. G. (1997), "A cross-cultural comparison of consumer ethnocentrism in the United States and Russia", *Journal of International Consumer Marketing*, Vol. 9 No. 4, pp. 73-93.
- Eagly, A. H., and Chaiken, S. (1993), *The Psychology of Attitudes*. Harcourt Brace Jovanovich, Orlando, FL.
- Festervand, T. A., and Sokoya, S. K. (1994), "Consumer ethnocentrism in a developing economy: a preliminary investigation", *The International Executive*, Vol. 36 No. 1, pp. 95-105.
- Fishbein, M., and Ajzen, I. (1974), "Attitudes towards objects as predictors of single and multiple behavioural criteria", *Psychological Review*, Vol. 81 No. 1, pp. 59-74.
- Fishbein, M., and Ajzen, I. (2005), "The influence of attitudes on behaviour", in D. Albarracín, B. T. Johnson, and M. P. Zanna (Eds.), *The handbook of attitudes*, Mahwah, NJ: Erlbaum, pp. 173-221.
- Good, L. K., and Huddleston, P. (1995), "Ethnocentrism of Polish and Russian consumers: are feelings and intentions related?" *International Marketing Review*, Vol. 12 No. 5, pp. 35-48.
- Grant, P.R. (1993), "Ethnocentrism in response to a threat to social identity", *Journal of Social Behavior & Personality*, Vol. 8 No. 6, pp. 143-54.
- Han, C. M. (1989), "Country image: halo or summary construct?" *Journal of Marketing Research*, Vol. 26 No. 2, pp. 222-229.
- Herche, J. (1992), "A note on the predictive validity of the CETSCALE", *Journal of the Academy of Marketing Science*, Vol. 20 No. 3, pp. 261-264.

- Hogg, M. A., and Terry, D. I. (2000), "Social identity and self-categorization processes in organizational contexts", *Academy of Management Review*, Vol. 25 No. 1, pp. 121-140.
- Hong, S. T., and Wyer, R. S. (1989), "Effects of country-of-origin and product-attribute information on product evaluation: an information processing perspective", *Journal of Consumer Research*, Vol. 16 No. 2, pp. 175-187.
- Huddleston, P., Good, L. K., and Stoel, L. (2001), "Consumer ethnocentrism, product necessity and Polish consumers' perceptions of quality", *International Journal of Retail & Distribution Management*, Vol. 29 No. 5, pp. 236-246.
- Interbrand (2014), "Best global brands rankings," available at <http://www.bestglobalbrands.com/2014/ranking/> (accessed 3 March 2015).
- Jacoby, J., Olson, J. C., and Haddock, R. A. (1971), "Price, brand name, and product composition characteristics as determinants of perceived quality", *Journal of Applied Psychology*, Vol. 55 No. 6, pp. 570.
- Kaiser, F. G., Byrka, K., and Hartig, T. (2010), "Reviving Campbell's paradigm for attitude research", *Personality and Social Psychology Review*, Vol. 14 No. 4, pp. 351-367.
- Kaiser, F. G., and Schultz, P. (2009), "The attitude-behaviour relationship: a test of three models of the moderating role of behavioural difficulty", *Journal of Applied Social Psychology*, Vol. 39 No. 1, pp. 186-207.
- Kaynak, E., and Kara, A. (2002), "Consumer perceptions of foreign products: an analysis of product-country images and ethnocentrism", *European Journal of Marketing*, Vol. 36 No. 7/8, pp. 928-949.
- Kesić, T., Rajh, E., and Ozretić Došen, Đ. (2004), "Effects of attitudes and consumer ethnocentrism on intentions to buy domestic vs. foreign products in Croatia and

- Bosnia and Herzegovina”, in *Proceedings of the Academy of Marketing Science Cultural Perspectives on Marketing Conference*, September.
- Kim, S., and Pysarchik, D. T. (2000), “Predicting purchase intentions for uni-national and bi-national products”, *International Journal of Retail & Distribution Management*, Vol. 28 No. 6, pp. 280-291.
- Klein, J. G., Ettenson, R., and Morris, M. D. (1998), “The animosity model of foreign product purchase: an empirical test in the People's Republic of China”, *Journal of Marketing*, Vol. 62 No. 1, pp. 89-100.
- Kogut, B., and Singh, H. (1988), “The effect of national culture on the choice of entry mode”, *Journal of International Business Studies*, Vol. 19, No. 3, pp. 411-432.
- Kwak, H., Jaju, A., and Larsen, T. (2006), “Consumer ethnocentrism offline and online: the mediating role of marketing efforts and personality traits in the United States, South Korea, and India”, *Journal of the Academy of Marketing Science*, Vol. 34 No. 3, pp. 367-385.
- Lantz, G., and Loeb, S. (1998), “An examination of the community identity and purchase preferences using the social identity approach”, *Advances in Consumer Research*, Vol. 25 Issue 1, pp. 486-491.
- Lee, R., and Mazodier, M. (2015), “The roles of consumer ethnocentrism, animosity, and cosmopolitanism in sponsorship effects”, *European Journal of Marketing*, Vol. 49 No. 5/6, pp. 919-942.
- Lee, W. N., Hong, J. Y., and Lee, S. J. (2003), “Communicating with American consumers in the post 9/11 climate: an empirical investigation of consumer ethnocentrism in the United States”, *International Journal of Advertising*, Vol. 22 No. 4, pp. 487-510.

- Li, W. K., and Wyer, R. S., Jr. (1994), "The role of country of origin in product evaluations: informational and standard-of-comparison effects", *Journal of Consumer Psychology*, Vol. 3 No. 2, pp. 187-212.
- Liang, K. Y., and Zeger, S. L. (1986), "Longitudinal data analysis using generalized linear models", *Biometrika*, Vol. 73 No. 1, pp. 13-22.
- Ma, J., Wang, S., and Hao, W. (2012), "Does cultural similarity matter? Extending the animosity model from a new perspective", *Journal of Consumer Marketing*, Vol. 29 No. 5, pp. 319-332.
- MacDonald, K. (2006), "Psychology and white ethnocentrism", *The Occidental Quarterly*, Vol. 6 No. 4, pp. 7-46.
- Maison, D., Greenwald, A. G., and Bruin, R. H. (2004), "Predictive validity of the Implicit Association Test in studies of brands, consumer attitudes, and behavior", *Journal of Consumer Psychology*, Vol. 14 No. 4, pp. 405-415.
- Olsen, J.E., Granzin, K.L., and Biswas, A. (1993), "Influencing consumers' selection of domestic versus imported products: implications for marketing based on a model of helping behavior", *Journal of the Academy of Marketing Science*, Vol. 21 No. 4, pp. 307-321.
- Orth, U. R., and Firbasova, Z. (2003), "The role of consumer ethnocentrism in food product evaluation", *Agribusiness*, Vol. 19 No 2, pp. 137-153.
- Ouellette, J. A., and Wood, W. (1998), "Habit and intention in everyday life: the multiple processes by which past behaviour predicts future behaviour", *Psychological Bulletin*, Vol. 124 No. 1, pp. 54.
- Poon, P., Evangelista, F., and Albaum, G. (2010), "Attitudes of migrants towards foreign-made products: an exploratory study of migrants in Australia", *Journal of Consumer Marketing*, Vol. 27 No. 1, pp. 35-42.

- Ranjbarian, B., Rojuee, M., and Mirzaei, A. (2010), "Consumer ethnocentrism and buying intentions: an empirical analysis of Iranian consumers", *European Journal of Social Sciences*, Vol. 13 No. 3, pp. 371-386.
- Samiee, S. (1994), "Customer evaluation of products in a global market", *Journal of International Business Studies*, Vol 25 No3, pp. 579-604.
- Shankarmahesh, M. N. (2006), "Consumer ethnocentrism: an integrative review of its antecedents and consequences", *International Marketing Review*, Vol. 23 No. 2, pp. 146-172
- Sharma, P. (2015), "Consumer ethnocentrism: reconceptualization and cross-cultural validation", *Journal of International Business Studies*, Vol. 46 No. 3, pp. 381-389.
- Sharma, S., Shimp, T. A., and Shin, J. (1995), "Consumer ethnocentrism: a test of antecedents and moderators", *Journal of the Academy of Marketing Science*, Vol. 23 No. 1, pp. 26-37.
- Shimp, T. A., and Sharma, S. (1987), "Consumer ethnocentrism: construction and validation of the CETSCALE", *Journal of Marketing Research*, Vol. 24 No. 3, pp. 280-289.
- Steenkamp, J. B. E., Batra, R., and Alden, D. L. (2003), "How perceived brand globalness creates brand value", *Journal of International Business Studies*, Vol. 34 No. 1, pp. 53-65.
- Suh, T., and Kwon, I. W. G. (2002), "Globalization and reluctant buyers", *International Marketing Review*, Vol. 19 No. 6, pp. 663-680.
- Supphellen, M., and Rittenburg, T. L. (2001), "Consumer ethnocentrism when foreign products are better", *Psychology & Marketing*, Vol. 18 No. 9, pp. 907-927.
- Swoboda, B., Pennemann, K., and Taube, M. (2012), "The effects of perceived brand globalness and perceived brand localness in China: empirical evidence on Western,

- Asian, and domestic retailers”, *Journal of International Marketing*, Vol. 20 No. 4, pp. 72-95.
- Tajfel, H., Billig, M. G., Bundy, R. P., and Flament, C. (1971), “Social categorization and intergroup behaviour”, *European Journal of Social Psychology*, Vol. 1 No. 2, pp. 149-178.
- Tetlock, P. E., Skitka, L., and Boettger, R. (1989), “Social and cognitive strategies for coping with accountability: conformity, complexity, and bolstering”, *Journal of Personality and Social Psychology*, Vol. 57 No. 4, pp. 632-640.
- United Nations Conference on Trade and Development (1998), *World Investment Report 1998: Trends and Determinants*. UNCTAD, New York.
- Verlegh, P. W. (2007), “Home country bias in product evaluation: the complementary roles of economic and socio-psychological motives”, *Journal of International Business Studies*, Vol. 38 No. 3, pp. 361-373.
- Vida, I., and Reardon, J. (2008), “Domestic consumption: rational, affective or normative choice?” *Journal of Consumer Marketing*, Vol. 25 No. 1, pp. 34-44.
- Wallace, D. S., Paulson, R. M., Lord, C. G., and Bond Jr, C. F. (2005), “Which behaviours do attitudes predict? Meta-analyzing the effects of social pressure and perceived difficulty”, *Review of General Psychology*, Vol. 9 No. 3, pp. 214.
- Wang, C. L., and Chen, Z. X. (2004), “Consumer ethnocentrism and willingness to buy domestic products in a developing country setting: testing moderating effects”, *Journal of Consumer Marketing*, Vol. 21 No. 6, pp. 391-400.
- Watson, J. J., and Wright, K. (2000), “Consumer ethnocentrism and attitudes toward domestic and foreign products”, *European Journal of Marketing*, Vol. 34 No. 9/10, pp. 1149-1166.

- Werner, P. D. (1978), "Personality and attitude-activism correspondence", *Journal of Personality and Social Psychology*, Vol. 36 No. 12, pp. 1375.
- Witkowski, T. (1998), "Consumer ethnocentrism in two emerging markets: determinants and predictive validity", in Alba, J. W. and Hutchinson, J. W. (Eds.), *Advances in Consumer Research*, Vol. 25, Association for Consumer Research, Provo, UT, pp. 258-263.
- Yu, J. H., and Albaum, G. (2002), "Sovereignty change influences on consumer ethnocentrism and product preferences: Hong Kong revisited one year later", *Journal of Business Research*, Vol. 55 No. 11, pp. 891-899.
- Zarkada-Fraser, A., and Fraser, C. (2002), "Store patronage prediction for foreign-owned supermarkets", *International Journal of Retail & Distribution Management*, Vol. 30 No. 6, pp. 282-299.
- Zeugner-Roth, K. P., Zabkar, V., and Diamantopoulos, A. (2015), "Consumer ethnocentrism, national identity, and consumer cosmopolitanism as drivers of consumer behavior: a social identity theory perspective", *Journal of International Marketing*, Vol. 23 No. 2, pp. 25-54.
- Zhang, Y., and Khare, A. (2009), "The impact of accessible identities on the evaluation of global versus local products", *Journal of Consumer Research*, Vol. 36 No. 3, pp. 524-537.

**Table I.** Demographic characteristics of respondents

	%
Gender	
Male	56.6
Female	43.4
Age	
Under 18	2.2
18-24	7.1
25-44	32.3
45-60	37.4
Over 60	20.9
Highest Level of Education	
Junior High School	0.4
High School	11.5
College No Degree	20.4
Bachelor's Degree	34.7
Master's Degree	21.8
Professional Degree	6.7
Doctoral Degree	4.4
Income	
Under \$20,000	9
\$20,000-40,000	17.9
\$40,001-60,000	16
\$60,001-80,000	17.7
\$80,001-100,000	10.5
Over \$100,000	29

**Table II.** Repeated measures logistic regression results<sup>a</sup>

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Predictors	Wald $\chi^2$	df	Sig.
Gender	3.504	1	.061
Age	3.418	4	.490
Education	1.307	4	.860
Income	4.238	5	.516
Ethnicity	.047	1	.829
Global brand	274.799	1	.000
Product	1000.825	9	.000
CETSCALE	6.331	1	.012
Product $\times$ CETSCALE	27.620	9	.001
Global brand $\times$ CETSCALE	.254	1	.614

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<sup>a</sup> Dependent variable: purchase of domestic brands across 10 product categories.

**Table III.** Repeated measures logistic regression parameters for the interaction between CETSCALE and product category. (Dependent variable: purchase of domestic brands)

Parameter	B	Std. Error	Hypothesis Test				Exp(B)
			Wald $\chi^2$	df	Sig.		
[product=Cars] × CETSCALE	.045	.0593	.566	1	.452	1.046	
[product=Shoes] × CETSCALE	.054	.0561	.919	1	.338	1.055	
[product=Beer] × CETSCALE	.018	.0484	.141	1	.708	1.018	
[product=Refrigerators] × CETSCALE	.044	.0351	1.572	1	.210	1.045	
[product=Washing machines] × CETSCALE	.089	.0366	5.943	1	<b>.015</b>	1.093	
[product=Camera] × CETSCALE	.218	.1474	2.181	1	.140	1.243	
[product=Cell phone] × CETSCALE	.134	.0550	5.971	1	<b>.015</b>	1.144	
[product=Laptop] × CETSCALE	.121	.0429	7.992	1	<b>.005</b>	1.129	
[product=Clothing] × CETSCALE	.111	.0499	4.999	1	<b>.025</b>	1.118	
[product=Coffee] × CETSCALE (reference category)	0 <sup>a</sup>					1	

**Table IV.** Repeated measures logistic regression results (dependent variable: purchase of foreign brand)<sup>a</sup>

Predictors	Wald $\chi^2$	df	Sig.
Gender	.759	1	.384
Age	7.375	4	.117
Income	17.697	5	.003
Education	5.429	4	.246
Ethnicity	.139	1	.709
CETSCALE	3.369	1	.066
Product	326.052	9	.000
Cultural distance	15.803	1	.000
Product $\times$ CETSCALE	102.359	9	.000
Cultural distance $\times$ CETSCALE	2.332	1	.127

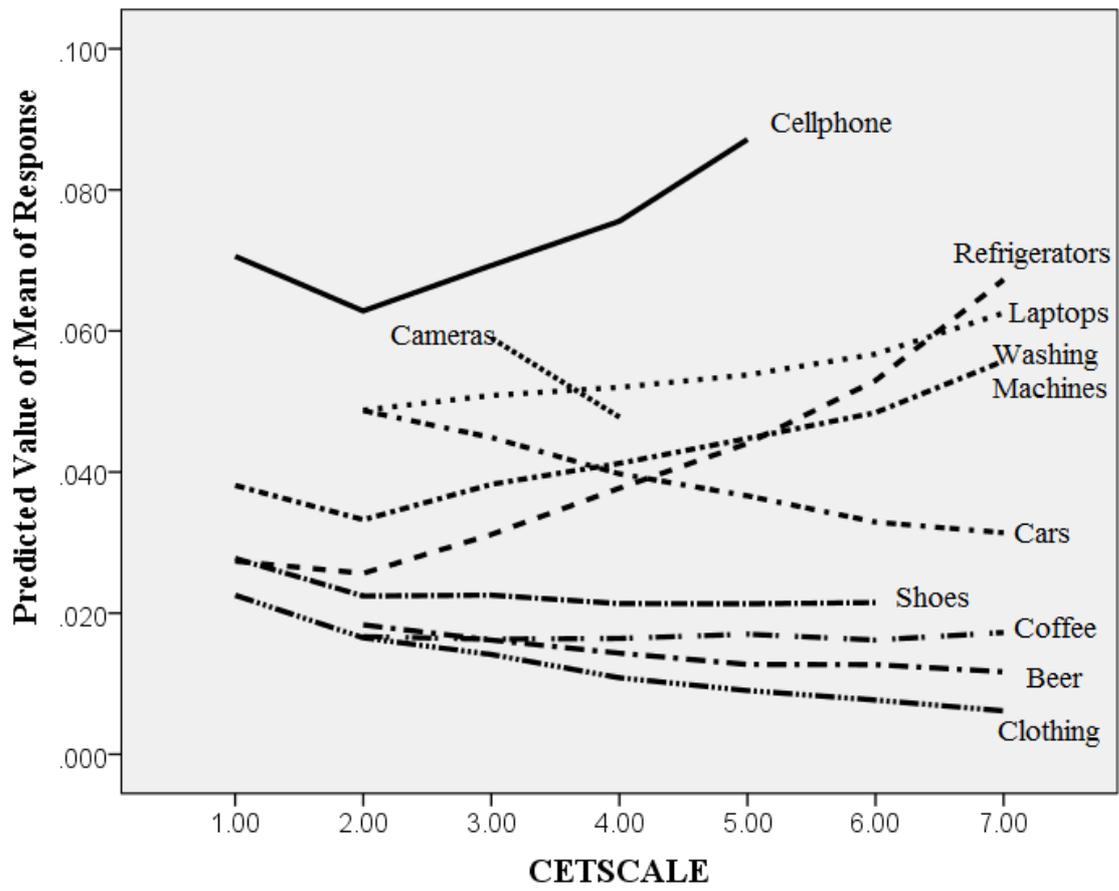
<sup>a</sup> Dependent variable: purchase of foreign brands across 10 product categories.

**Table V.** Repeated measures logistic regression parameters for the interaction between CETSCALE and product category (dependent variable: purchase of foreign brands)

Parameter	B	Std. Error	Hypothesis Test			
			Wald $\chi^2$	df	Sig.	Exp(B)
[products=Cars] × CETSCALE	.337	.0561	36.104	1	.000	1.401
[products=Shoes] × CETSCALE	.171	.0522	10.789	1	.001	1.187
[products=Beer] × CETSCALE	.061	.0556	1.201	1	.273	1.063
[products=Refrigerators] × CETSCALE	.405	.0562	51.878	1	.000	1.499
[products=Washing machines] × CETSCALE	.397	.0592	44.956	1	.000	1.487
[products=Camera] × CETSCALE	.421	.0533	62.542	1	.000	1.524
[products=Cell phone] × CETSCALE	.567	.0537	111.744	1	0.000	1.764
[products=Laptop] × CETSCALE	.450	.0546	67.746	1	.000	1.568
[products=Clothing] × CETSCALE	-.103	.0735	1.959	1	.162	.902
[products=Coffee] × CETSCALE (reference category)	0 <sup>a</sup>					1

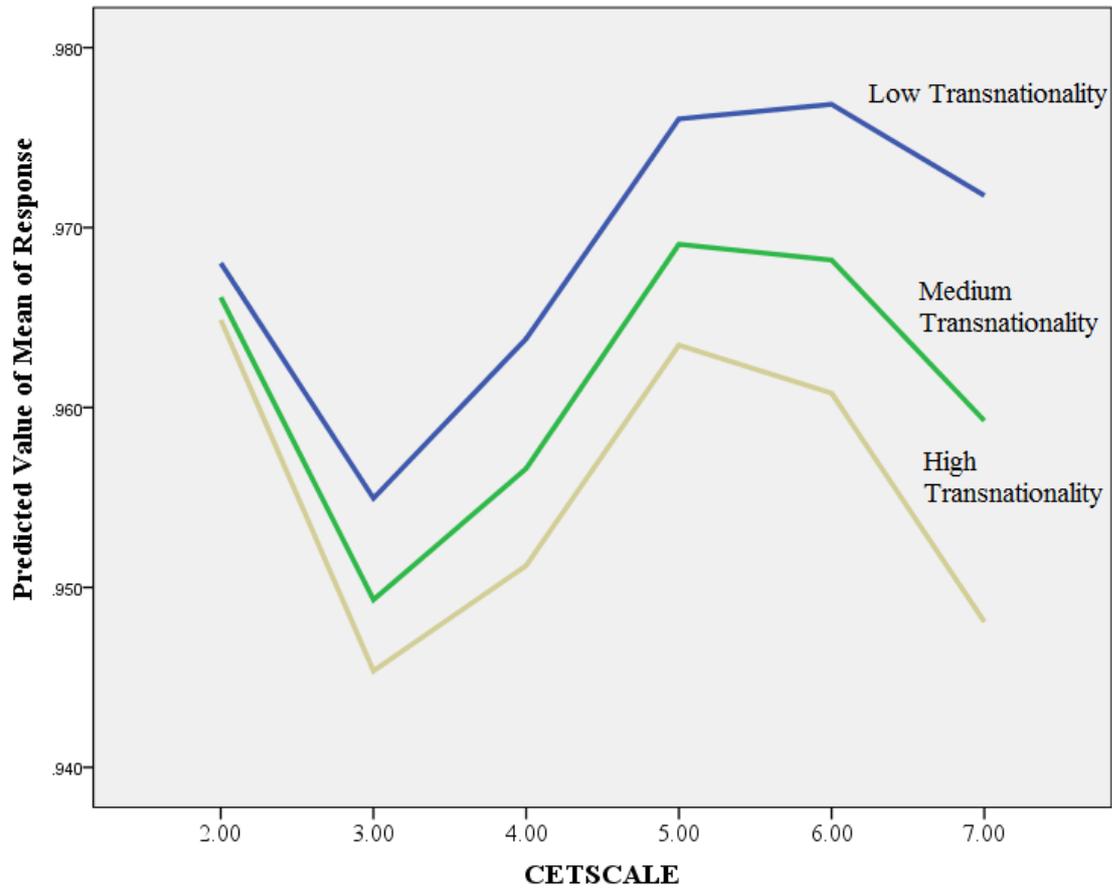
**Figure I.**

Predicted value of mean response for purchase of domestic brands



**Figure II.**

Predicted value of the mean response for the purchase of domestic car brands of different levels of transnationality



**Figure III**

Predicted value of the mean response for the purchase of foreign brands

