

# **Consumer Ethnocentrism in the Middle East: Measurement Properties of the CETSCALE in Tunisia and Lebanon**

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## **ABSTRACT**

*Country of origin is an important construct in consumer decision making relative to purchasing foreign or domestic products or services. Consumer ethnocentrism has been shown to be an important determinant in purchasing foreign versus domestic products. The CETSCALE used to measure consumer ethnocentrism was introduced in the U.S. by Shimp and Sharma (1987). Given the importance of country of origin to international marketers, the role of consumer ethnocentrism in decision making has been studied in many countries in order to understand their consumer attitudes toward purchasing foreign products or services. However, the measurement properties of CETSCALE have been evaluated in only a limited number of countries with mixed results. Therefore it is increasingly necessary to examine the measurement properties of the CETSCALE in important national and regional markets. The Arab Middle East is certainly an import region but it is neglected in such research. This study seeks to fill that gap by examining the measurement properties of the CETSCALE with a sample of 300 Lebanese and 164 Tunisian consumers. A modified 7- item CETSCALE demonstrated very good cross-national reliability and validity in these two Arab Middle East countries.*

## **INTRODCUTION**

International consumer marketing scholars and managers have stressed the role of globalization in the world economy and its effect on consumer decision making (Saeed, 1994). In the era of globalization, consumers have the choice among products from different national origins. These global consumers do not evaluate products based only on variables such as quality and price but also take into account a variable such as country of origin (COO) (Suh and Kwon, 2002). When consumers are not familiar with the product, they tend to rely on country of origin as a cue to indicate the quality of the product (Johansson et al., 1985). However, sometimes consumers might be convinced of the high quality of a product and still not buy it due to their own ethnocentrism. Indeed, due to a feeling of ethnocentrism, some consumers might consider it wrong to buy foreign products believing that such purchases will hurt their national economy.

Shimp and Sharma (1987) developed the CETSCALE in the U.S. to assess consumer ethnocentrism and its impact on consumer purchase behavior. The measurement properties of the CETSCALE are an essential basis for such inquiries. For cross-national research, the measurement properties of the scales need to be equivalent in order to make reliable and valid comparisons (Davis, Douglas, and Silk, 1981; Netemeyer, Durvasula, and Lichtenstein, 1991; Mullen, 1995; Parameswaran and Yaprak, 1987). Researchers have examined the measurement properties of this critical scale in many cultures and markets

(e.g., US, China, Australia, the Netherlands, Turkey, Russia, Malaysia, Japan, Germany), however, the Middle Eastern market has been neglected in such studies. The purpose of this study is to investigate the measurement properties of the CETSCALE in two Arab Middle Eastern countries and examine whether the CETSCALE exhibits measurement equivalence across nation (Netemeyer, et al., 1991; Mullen, 1995).

## **LITERATURE REVIEW**

Research on consumer evaluation of foreign products has shown that the country of origin is an important variable used by consumers to evaluate foreign products. These studies have found that the country of origin, among other attributes, might be considered as a determinant criterion in the consumer decision process. In some cases, the country's manufacturing and technological abilities are used usually as an indication of the product's quality (Bilkey and Nes, 1982). Most of the studies about country of origin or country image define country of origin as either the image of a country's products in terms of quality or define it as an extrinsic cue used by consumers to infer quality (Knight and Calantone, 2000).

However, consumers do not always rely on the cognitive aspect of country of origin, but may sometimes rely on the affective aspect of country of origin in their decision process. Indeed, consumers do not always use country image to evaluate or infer the quality of products but may use it as well to express their reluctance towards purchasing foreign products in general. This feeling has been attributed to consumer ethnocentrism (Shimp and Sharma, 1987).

### **Consumer Ethnocentrism**

Consumer ethnocentrism is derived from ethnocentrism, introduced by Sumner in 1906. Sumner (1906, p. 13) defined ethnocentrism as "the view of things in which one's own group is the centre of everything and all others are scaled and rated with reference to it." Consumer ethnocentrism is a sociological concept that is related to in-group vs. out-group social identity theory and is targeted towards all foreign products. Consumer ethnocentrism has been defined as the "unique proclivity for people to view their own group as the center of the universe, to interpret other social units from the perspective of their own group, and to reject persons who are culturally dissimilar while blindly accepting those who are culturally like themselves," (Shimp and Sharma 1987, p. 24).

Consumer ethnocentrism represents beliefs that purchasing imported products is wrong and immoral because it can hurt the domestic economy and can cause the loss of jobs (Shimp and Sharma, 1987). Ethnocentric consumers prefer domestic goods because they believe that their country's products are the best and that their products are superior in quality to any other country's products (Klein et al., 1998).

Ethnocentrism consists of an unfavorable attitude toward out-groups with a favorable attitude toward the in-group (Balabanis and Diamantopoulos, 2004). Consumer ethnocentrism is integral to the consumer's product evaluation process as part of the product bundle (Shimp and Sharma, 1987). Studies on consumer ethnocentrism generally have found that scores on the CETSCALE are inversely related to willingness to buy imports and perceptions of imported products (Shimp and Sharma, 1987; Netemeyer, et al., 1991). A consumer who scores high on the CETSCALE evaluates domestic products of higher quality than foreign products and thus will avoid buying foreign products out of concern for his/her domestic economy. Consumers high in ethnocentrism tend to be females with lower socioeconomic status and are usually concerned about their personal finances and the nation's economy and to be more patriotic and union members (Klein and Ettenson, 1999).

Studies on ethnocentrism and COO have been conducted in many nations. For instance, Balabanis and Diamantopoulos (2004) investigated consumer ethnocentrism in the Czech Republic and Turkey, Good and Huddleston (1995) in Poland and Russia and Hult, Keillor and Lafferty (1999) in Japan, the U.S and Sweden. Ye Sheng, Ben Mrad and Mullen (2008) looked at US attitudes toward Chinese products with ethnocentrism as a moderating variable. In general, the literature agrees on the fact that consumers might rely on their ethnocentric feelings when they feel threatened by imports and as a result tend to evaluate domestic products more favorably than imported products.

In summary, country of origin may be used by consumers as an information cue to evaluate products' quality and to make a buying decision (Bilkey and Nes 1982; Han 1989). When choosing among foreign products, ethnocentric consumers tend to choose domestic products rather than foreign products because they believe that domestic products have better quality than their foreign counterparts. In sum, consumer ethnocentrism is more related to the comparison between domestic brands and foreign brands in general and is not targeted towards a specific nation.

### **International Measurement Analysis of the CETSCALE**

Understanding the role of consumer ethnocentrism in international consumer choice is critical to international marketers: however, the science to understand this important determinant of consumer choice rests on the sound measurement of the underlying construct of ethnocentrism. While consumer ethnocentrism has been studied in many countries, the measurement properties of CETSCALE have only been formally analyzed in a select set of primarily developed countries. Netemeyer and colleagues (1991) did the first cross-national assessment of the CETSCALE in the U.S., France, Japan and West Germany. They found strong support for the cross-national factor structure and reliability of the CETSCALE although dimensionality varied. They urged scholars to continue the investigation, especially for important markets. Since their call for more research, measurement properties of the CETSCALE have been examined in Japan, the U.S. and Sweden (Hult, et al., 1999; the Netherlands (Douglas, and Nijssen, 2003); Spain (Teodoro, Ibanez-Zapata, and Barrio-Garcia, 2000); and in the Czech Republic, Hungary and Poland (Lindquist, Vida and Fairhurst, 2001) with mixed results. Recently, market researchers have turned their attention to the measurement properties of the CETSCALE in Asia: India (Bawa, 2004), Thailand (Pimpa and Suwannapirom, 2006), and Malaysia (Teo, Mohamad, and Ramayah, 2011). However, there are, to the best of our knowledge, no studies to date that examine the measurement properties of consumer ethnocentrism in the Arab Middle East.

## **THE RESEARCH STUDY**

### **Measures and Measure Development**

To assess respondents' attitudes towards buying foreign products in general, ethnocentrism was measured using Shimp and Sharma's (1987) 10-item CETSCALE. For the surveys in Lebanon and Tunisia, three types of cross-cultural equivalence were ensured: normative, semantic, and measurement equivalence (Cannon et al, 2010; Mullen, 1995). Normative equivalence has been defined as "the extent to which all research concepts and questions are equally acceptable across cultures" (Cannon et al, 2010). To ensure normative equivalence, academics and graduate students were asked whether the concepts and questions used "are acceptable across cultures." Semantic equivalence "refers to choosing words and sentence structures that ensure the meaning of an item is retained following translation," (Cannon et al, 2010). In this case, translation and back-translation were used to make sure that the meanings of the words and sentences did not change

across cultures. In Tunisia, the survey was translated to French and back-translated to English (Brislin, 1970; Craig and Douglas, 2000). A final check of the French survey version was undertaken by colleagues in Tunisia. Two items were eliminated from the survey because, they did not make sense in French when translated indicating a lack of normative and semantic equivalence.

Finally, measurement equivalence consists of configural and factor invariance. Configural invariance is demonstrated if the factor structure does not differ across cultures. Good fit of the stacked models and a lack of high modification indices are indicators of configural invariance. A chi-square difference test is used to examine the invariance of factor loadings across the two samples (Mullen, 1995).

## Pretest Study

**Table 1: Factor Loadings for Ethnocentrism**

	<b>Lebanon</b>	<b>Tunisia</b>
Eth1: Only those products that are unavailable in Lebanon should be imported	0.871	0.692
Eth2: It is not right to purchase foreign because it puts Lebanese out of jobs	0.803	0.822
Eth3: A real Lebanese should always buy products made in Lebanon	0.971	0.747
Eth4: We should buy products manufactured in Lebanon instead of letting other countries getting rich off of us	0.726	0.749
Eth5: Lebanese should not buy foreign products because this hurts Lebanese businesses and cause unemployment	0.670	0.746
Eth6: It may cost me in the long run but I prefer to support Lebanese products	0.767	0.810
Eth7: We should buy from foreign countries only those products that we cannot obtain within our own country	0.756	0.200
Eth8: Lebanese consumers who purchase products made in other countries are responsible for putting their fellow Lebanese out of work	0.478	0.822

The survey pretest was administered to 50 individuals from different backgrounds in both Tunisia and Lebanon. An exploratory factor analysis was used for measure analysis and to purify the measures (Churchill, 1979). The factor loadings are shown in Table 1 above. Seven items of the modified CETSCALE were kept in the full study. Ethnocentrism 3 (“A real Lebanese should always buy products made in Lebanon.”) was eliminated because it loaded on a factor by itself in Lebanon, while in Tunisia, it cross-loaded with all the other factors. Even though Ethnocentrism 7 loaded low in Tunisia, it was maintained due to the fact that it loaded high in Lebanon and maintained the equivalent factor structure.

## Main Study

### *Sample*

The questionnaires were administered by graduate students in Lebanon and Tunisia. Data were collected in shopping malls in both countries, with consumers being approached randomly at several sites. Having agreed to participate, the respondents filled out the surveys and then were thanked for their cooperation. The total sample in Lebanon was 300 consumers with a ration of 56% males to 44% female. The Tunisian sample consisted of 164 consumers with 51% males and 49% female.

Missing data were treated with the listwise deletion in PRELIS in preparation for the CFA. In addition, skewness and kurtosis were examined in both countries indicating that the data were normally distributed.

### Reliability and Validity

Confirmatory Factor Analysis (CFA) was performed with *Lisrel 8* (Joreskog and Sorbom, 1996) to assess the measurement properties of the scales. The factor loadings, t- values and squared multiple correlations were examined for each item to test for convergent validity (Bollen, 1989). Items that were retained (see Table 2).

**Table 2: Ethnocentrism: Unstandardized and Standardized Factor Loadings**

Item	Unstandardized Factor Loading	Completely Standardized Factor Loading	Error Term	T values	R square
<b>Tunisia</b>					
ETH 1	1.00	0.64			0.42
ETH 2	0.93	0.71	0.12	7.78	0.51
ETH 3	1.01	0.82	0.12	8.65	0.67
ETH 4	0.57	0.64	0.08	7.09	0.40
ETH 5	1.27	0.82	0.15	8.69	0.68
ETH 6	0.89	0.71	0.11	7.80	0.51
ETH 7	1.19	0.78	0.14	8.37	0.61
<b>Lebanon</b>					
ETH 1	1.00	0.60			0.36
ETH 2	0.85	0.52	0.12	7.20	0.27
ETH 3	1.36	0.68	0.16	8.69	0.46
ETH 4	0.87	0.46	0.13	6.56	0.21
ETH 5	1.06	0.68	0.12	8.75	0.47
ETH 6	1.07	0.63	0.13	8.28	0.39
ETH 7	1.12	0.67	0.13	8.62	0.45

Exhibited high standardized factor loadings and high squared multiple correlations, indicating the extent to which each observed variable adequately measured its respective underlying construct and, thus, serves as a reliability indicator (Bollen, 1989). The remaining scales for ethnocentrism all had statistically significant factor loadings with standardized values all over 0.40. The squared multiple correlations were all acceptable with a range from 68% to a more modest  $R^2$  of 21%.

### Invariance Tests

To ensure configural invariance, we examined the invariance of the factor structures across the Tunisian and Lebanese data. The items compromising the modified CETSCALE exhibited the same configuration in both countries. Further, as shown in Table 3, the CETSCALE showed factorial loading invariance between the countries (Mullen, 1995).

**Table 3: Ethnocentrism Factor Invariance in Lebanon and Tunisia**

	Chi square	df	$\chi^2/df$	NNFI	CFI	GFI	RMSEA	$\Delta\chi$	$\Delta df$
Base model	82.82	12	6.90	0.85	0.91	0.88	0.17		
Base model	80.77	15	5.38	0.89	0.92	0.91	0.14	-2.05	3

### Reliability

Cronbach's alpha is a traditional statistic used to measure internal consistency of multiple item constructs. Cronbach's  $\alpha$  for the modified CETSCALE was 0.77 in Lebanon and 0.87 in Tunisia, indicating acceptable reliability. However, Cronbach's alpha is very sensitive to the number of items used

in a scale. Therefore, scale reliability and validity were also assessed by measuring composite reliability and average variance extracted (Fornell and Larcker, 1981).

In a CFA model, composite reliability is analogous to Cronbach's alpha. An acceptable level of composite reliability is 0.80 or above with remaining items in the CETSCALE scoring 0.91 in Lebanon and 0.87 in Tunisia. The average variance extracted (AVE) measures the amount of variance for the specified indicators accounted for by the latent construct (Bagozzi and Yi, 1988). An AVE of .50 or greater supports the consistency among scale items (Fornell and Larcker, 1981). The AVE for the CETSCALE was 0.88 in Lebanon and 0.82 in Tunisia.

## **DISCUSSION**

We evaluated the measurement properties of Shimp and Sharma's (1987) CETSCALE in two Arab Middle East countries. Initial qualitative pretests in Lebanon and Tunisia eliminated two items that did not exhibit normative and semantic equivalence (Cannon et al., 2010) and quantitative pretest eliminated a 3<sup>rd</sup> item that exhibited a different factor structure across the two countries. The main study examines the measurement properties of the reduced CETSCALE with a sample of 300 consumers in Lebanon and 154 in Tunisia. The results provide support for the use of a reduced version of Shimp and Sharma's (1987) CETSCALE to measure ethnocentrism in two Arab Middle East countries, Lebanon and Tunisia. The reduced set of seven measures demonstrated measurement equivalence and cross-national reliability and validity (Mullen, 1995). While Netmeyer et al. (1991) found support for the cross-national reliability and validity for the full CETSCALE, our results are mixed in line with others such as Douglas and Nijssen (2003) in the Netherlands where they found equivalence for a reduced set of CETSCALE measures.

### **Implications**

Consumer ethnocentrism has been shown to be an important determinant in purchasing foreign versus domestic products. The CETSCALE used to measure consumer ethnocentrism was introduced in the U.S. by Shimp and Sharma (1987). Because of the importance of country of origin to international marketers, the role of consumer ethnocentrism in decision making has been studied in many countries in order to understand their consumer attitudes toward purchasing foreign products or services. However no studies conducted in the Arab Middle East have previously examined the measurement properties of the CETSCALE. These results provide confidence that a reduced set of CETSCALE measures may be used in country of origin research in the Arab Middle East.

### **Limitations and Future Research**

One limitation is the use of only two countries from the Middle-East. Indeed, the results cannot be generalized to all Middle-Eastern countries, especially non-Arab countries such as Iran or Israel. Additional research should be conducted in other countries of the Middle East to increase confidence in the generalizability of the model. In addition, in January 2011, a revolution occurred in Tunisia, which has affected the Tunisian economy negatively. Many foreign companies have pulled out of Tunisia, and many Tunisian companies are struggling to survive. Ethnocentric feelings have become more important. Tunisians are more than ever encouraging the consumption of local products and trying to discourage consumption of foreign products. Future research should examine the effect of revolution on consumer ethnocentrism and willingness to buy. For instance, it would be timely to do a follow on study in Tunisia

to be able to compare consumer attitudes before and after the revolution, a strong field test of causality (Cook and Campbell, 1979).

## CONCLUSION

Country of origin is an important variable in international consumer decision making. Consumer ethnocentrism is more related to the comparison between domestic brands and foreign brands in general and is not targeted towards a specific nation. Because of the importance of ethnocentrism, there is great interest in understanding its role in consumer choice in many national markets. As such, previous studies have examined the measurement properties of the CETSCALE in several countries but the increasingly important Arab world including the Middle East has been neglected. This study fills that gap by assessing the measurement properties of the CETSCALE in Tunisia and Lebanon with mixed results.

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