

Ethnocentrism & “Made in Tags” go Hand in Hand for Indian Youths “Cetscale Validation and Dimensionality Assessment”

Sandeep Singh^{1*} Swati Kewlani²

1. Acropolis Institute of Technology and Research, Indore Bypass Road, Manglia Square, Indore (M.P.), India
2. Chameli Devi School of Management, Chameli Devi Group of Institutions, Village Umrikheda, Near toll Booth, Khandwa road, Indore (M.P), India, PIN 452020

* E-mail of the corresponding author: swati.kewlani@gmail.com

Abstract

“Consumer Ethnocentrism is the meticulousness, indeed morality of purchasing foreign manufactured products”. Transnational economy creates a great pressure on marketers by mounting tough competition across the world, providing an opportunity to Indian customers to freely mobilize and have free access to overseas goods/services. In these circumstances, the topic of consumers’ ethnocentric penchant can’t be neglected. Improving the understanding of consumer’s ethnocentric belief, attitude and proclivity towards ‘in group’ and ‘out group’ product may help marketers to comprehend consumer’s purchase behavior and consequently maneuver strategic plans. However it is worth noting that the scale universally used to measure the construct is valid or not for Indian Consumers. This research addresses such an issue by validating CETSCALE in India. Data were collected from youths (Management graduates) by personally administering the questionnaire. Analysis was done using both the latest tools that is exploratory and confirmatory factor analysis; dimensionality was assessed using causal relation with impulsiveness. Findings show that ethnocentrism of Indian consumers is multidimensional and in a stage of transition, within the country bounds result are consistent with earlier research and contrary to commonly held belief for Indian youth, ethnocentrism and favorable belief about foreign product go hand in hand.

Key Words: Ethnocentrism, Cetscale, Validation, Dimensionality, Reliability.

1. Introduction

Ethnocentrism is a human universal phenomenon and almost a universal syndrome of bigoted attitudes and behaviors of people (Sumner 1906; LeVine and Campbell 1972). [It](#) is a one of the major reasons for splitting members of different [ethnicities](#), races, and religious groups in society. It is defined as a sensation that one’s own group has regarding a mode of living, values and prototype of adaptation that are superior to other groups (Haviland, 1993). It is believed by some scholars to be as old as the human pursuit (Kasomo, 2010). Indian consumers are free to choose the product/services they like, the brand they admire. Economy is changing at faster pace; FDI in single brand retail is a step ahead in this direction and such revolution is challenging Indian manufacturers and marketer on their own home turf. It is worth researching the belief and attitude of Indian consumers towards their country made products versus foreign made product to help Indian producers and marketers to foster themselves. The study of consumer ethnocentrism is considered as appropriate in a market like Indian market where vicious competition exists between domestic and foreign-made products.

To understand as to what actually make consumers inclined towards Indian products vs. foreign products, marketers need to put their feet in consumers’ shoes to realize the severity of their likings, feeling, preferences, and attitude, in brief, extent of consumers’ ethnocentrism. Purchasing foreign products is perceived as off beam as it will impair the domestic economy, by having an adverse impact on domestic employment and is considered unpatriotic as well. Previous studies have found high ethnocentrism scores are related to disinclination to procure foreign products and propensity to evaluate them negatively (Shimp and Sharma, 1987).

There are many examples of cross-cultural research conducted to test the CETSCALE. But it is scarce within a country. The credit for inspiring research into the phenomenon of consumer ethnocentrism goes to Bawa (2004), who conducted this research in northern part of India and she had suggested haulage this research in other parts of India.

1.1. Cetscale

To measure consumer ethnocentric tendencies related to purchasing foreign-versus American made products, Consumer Ethnocentrism Tendencies Scale (Cetscale) was developed by Shimp and Sharma in 1987. Different studies carried out in the U.S. endowed support for unidimensionality, reliability, convergent validity and discriminant validity for the 17- item Cetscale. Nevertheless, Shimp and Sharma (1987) and Netemeyer et al. (1991) have exhorted further testing to refine the scale. These exhortations have led to comparable studies in Korea (Sharma, Shimp and Shin, 1995), Azabijan (Kaynak and Kara, 1996), Western Europe (Good and Huddleston, 1995) and Australia (Mulye, et al. 1997). These studies have substantially validated the Cetscale. However, contrary to the recommendations by Shimp and Sharma (1987) and Netemeyer, et al. (1991), many past studies (Good and Huddleston 1995, Kaynak and Kara 1996, Herche 1994, Lantz and Loeb 1996) have replicated the Cetscale without pointing the psychometric properties of the measurement items.

The paper is structured as follows: First, to position the paper, the context of the study is provided by highlighting the objectives of studying this topic. This is followed by a brief review of prior ethnocentrism research. Methodology is presented, followed by discussion of the results. The paper concludes with a discussion and implications of the study's findings for marketing and research.

1.2. This research study has three broad objectives:

- To assess the validity and reliability of the CETSCALE amongst the youngsters of central India.
- To measure the extent of consumer ethnocentrism in India.
- Assess scales Dimensionality.

2. Review of Literature

Ethnocentrism is a culturally-biased verdict. The inception of the concept is attributed to Summer (1906) who explained it as a feeling of supremacy for one's group and all things associated to the group. Ethnocentrism anchored in the belief that one's own group (the in-group) is superior to other groups (out-groups) (Adorno et al., 1950). Over the years, the concept has supplemented psychological and now even economic connotations. Ethnocentrism is a concept of interest not only to sociologists, psychologists, and anthropologists but also to historians, political scientists, politicians, and administrators. Shimp and Sharma (1987) originated the concept of ethnocentrism to coincide with the marketing discipline by developing the construct of consumer ethnocentricity.

Consumer ethnocentrism is an discernible fact of the developed world (Okechuku, 1994; La Barre, 1994; Good and Huddleston, 1995; Durvasula, Andrews and Netemeyer, 1997; Vida and Fairhurst, 1999). Whereas, as per Stein (1987) Consumer ethnocentrism can be found both in developing and developed countries, and confers the individual a sense of identity, feelings of belongingness (Shimp and Sharma, 1987). Consumers from less developed countries have repeatedly revealed a manifest preference for imported goods (Papadopoulos, Heslop and Beraes, 1990; La Barre, 1994; Agbonifoh and Elimian, 1994; Mohammad *et al.*, 2000) and even people having chauvinism for home country products are in a minority (Johansson, Douglas and Nonaka, 1985). As per Shimp and Sharma (1987:288), "Various ethnocentrism scales have little significance to the study of consumer behavior and marketing phenomena". The CETSCALE therefore answers the supplication for domain-specific concepts in marketing and consumer behavior (Jacoby, 1978).

Researches conceded that consumers appraise products by using a number of cues, which may be extrinsic and/or intrinsic. Bias, real or imagined, toward products has featured outstandingly in the literature. One of these biases is the economic development of the country of origin leading to the discernment that products manufactured in advanced western countries are better than those from developing or less developed countries (Bilkey and Nes, 1982).

Basically, domestic goods are favored in countries where (1) consumers have a strong sense of patriotism or national pride (Reiersen 1966; Nagashima 1977; Baumgartner, Jolibert 1978), (2) the domestic economy is susceptible by foreign goods (Heslop, Papadopoulos 1993), (3) there is availability of product serviceability (Han, Terpstra 1988) and (4) there is unfamiliarity or unawareness with foreign products and brands (Ettenson, Gaeth 1991; Phau, Pendergast 2000).

The Indians are usually perceived as bawling for foreign brands. Batra *et al.*, 's (2000) paper encloses an account of literature that furnishes possible reasons for the average Indian's fondness for foreign products. The reason for the same could be, search for status symbols in the hierarchy-conscious Indian society, changing expectations, inferiority complex vis-à-vis the (erstwhile) foreign rulers, rising incomes, increased contact with the West, and cultural receptiveness to symbolism of brands. Nevertheless, there exists a different strain of thought as well. La Barre (1994) referencing the results of the Bozell-Gallup worldwide quality poll says: 'India is an import amenable country but it has a healthy self image.' This apparent contradiction is easy to comprehend when we remember that 'in India the open mind is as much a cultural legacy as the closed mind' (Ahmed, 1979).

Findings of many research studies shows that the more ethnocentric a nation is, the less favorable their attitude and the less likely they will hold purchase intentions toward foreign products. Places namely, France and Japan (Netemeyer *et al.* 1991), Soviet Armenia (Plank, Lindquist 1999), as well as Korea were found having negative relationship with preferences and purchase intentions toward foreign products. And the same has been found across the national boundaries. Sharma *et al.* (1995) quote that consumer ethnocentrism may result in an overestimation of the attributes and overall quality of domestic products and an underestimation of the quality of foreign products as it impairs the domestic economy, causes loss of jobs and is viewed as unpatriotic.

Klein, (2002) Orth & Girbasova, (2003) coined that individuals vary in consumer ethnocentrism and their levels of ethnocentrism persuades attitudes and intentions towards buying foreign goods. Highly ethnocentric consumers believe that buying foreign products or brands is unpatriotic and lean to favor local products or brands. Zhou and Hui (2003) advocated that Chinese consumers have shown a recent tendency away from foreign products and brands in preference for local products and brands due to increasing consumer ethnocentrism and improving local products.

Lightening on the validity and dimensionality aspects of CETSCALE, there appears to be some inconsistent results emerging in the literature. Several studies have reported the Cetscale as consisting of two (Mulye *et al.* 1997) or three dimensions (Marcox *et al.* 1997). (Ramayah, Mohamad, and Young and, Lo, 2011), reported two dimensions of CETSCALE. Other researchers, Herche, (1990); and Mulye *et al.* (1997) have found two factor solutions while Marcoux *et al.*, (1997) has found a three factor solution. (Bawa, 2004), found a three-factor solution for materials management professionals and senior secondary school students and a four-factor solution for university students. Rahman, Morshed and Hossan, (1999) originated seven dimensions of CETSCALE while studying on consumers of Bangladesh. Researchers namely, Netemeyer *et al.*, 1991; Durvasula, *et al.*, 1997; Shimp and Sharma, 1987, and Sharma *et al.*, 1995, originated that the CETSCALE measure is reliable with uni-dimensional factor structure. Similarly, the first ethnocentrism study in Russia (Saffu and Walker, 2005) also found the scale to have a unidimensional structure.

3. Hypotheses

H1: Each of the 17 items of the CETSCALE is unable to discriminate between high scorers and low scorers obtained by youths of central India.

H2: The CETSCALE has internal consistency.

H3: The CETSCALE is Uni-dimensional.

H4: The CETSCALE has Discriminant validity with respect to related phenomena against which it is tested.

H5: The CETSCALE has Nomological validity with respect to each of the variables in its nomological net against which it was tested.

H6: Indian youth are less ethnocentric compared to the youths in other parts of the world.

4. Methodology

4.1. Sample, Procedure and Measurement

A total of 200 questionnaires were distributed to management graduates in central India. From the total of 200 questionnaires, only 180 questionnaires were usable to be analyzed for the further study. The questionnaire consists of different sections consisting of various constructs measuring consumer ethnocentrism. Researcher has tried as far as possible, the constructs and variables used by other researchers to examine consumer ethnocentrism. CETSCALE- 17 items, 5 point likert scale, pertaining to consumer ethnocentrism, adopted from that of Shimp and Sharma's (1987). CETSCALE measure is one of the scales used in the questionnaire. CETSCALE has been tested by different researchers and found to be comparably reliable and valid in the United States, France, Japan, West Germany (Netemeyer *et al.* 1991), Russia (Durvasula *et al.* 1997), Korea (Sharma *et al.* 1995), Poland (Good, Huddleston 1995), Spain (Luque-Martinez *et al.* 2000) and Singapore (O'Cass, Lim 2002). A literal translation of the CETSCALE was used following the practice espoused by all the researchers previous to Douglas and Nijssen (2002).

The similar constructs presumed to measure consumer ethnocentrism were used so as to estimate Divergent validity of CETSCALE. Scales used were namely, Image of home country, the relevant part of the country-of-origin scale, developed by Parmeswaran and Pisharodi (1994), Quality consciousness was measured with the three-item perfectionist/ high quality conscious scale (Sproles and Kendall, 1986). Belief about foreign-made products and belief about products made in India were measured with two similar, four-item, seven-point scales, adapted from the scales used by Klein, Ettenson and Morris (1998) and Nijssen, Douglas and Bressers (2002). The validity and reliability of these 'borrowed scales' was tested before they were put to use.

4.2. Psychometrics of the Scale: Discriminating Power of 17 items of Cetscale

To examine the discriminating power between all the 17 items, total mean scores of all respondents, mean scores of the top 25 per cent scorers, and the bottom 25 per cent scorers were calculated (Table 1). The difference in the mean scores obtained by the top 25 per cent scorers and bottom 25 per cent scorers were tested with the *t*-test. All *t* values were significant at .01 level of significance (Table 2). Thus, each item of the CETSCALE has discriminating power. Therefore Null Hypothesis 1 is rejected, clarifying that there exist a significant difference between all the 17 items of CETSCALE.

Table 1: Discriminating Power of the Items of the Cetscale

Items	Mean for all respondents n*	Mean for Low Quartile n* 44	Mean for High Quartile n* 45
1	3.30	1.57	4.51
2	2.48	1.00	4.29
3	2.19	1.00	3.80
4	3.17	1.60	4.38
5	4.16	3.07	5.00
6	3.98	2.85	4.97
7	3.53	2.10	4.42
8	3.06	1.67	4.22
9	3.13	1.61	4.06
10	2.68	1.46	4.09
11	3.02	1.67	4.13
12	3.78	2.32	4.81
13	3.20	1.78	4.32
14	3.83	2.5	4.67
15	3.60	2.00	4.77
16	2.37	1.00	4.06
17	3.43	1.92	4.29

Notes: Responses were obtained on a five-point scale with one being strongly disagree (low ethnocentrism) and

five being strongly agree (high ethnocentrism).

Table 2: T-Test

Sample	t-value	P value
Youths(Management Graduates)	7.5	.003

4.3. Reliability of the Measures

To assess the reliability of CETSCALE, researcher used the inter-item consistency measure of Cronbach's alpha. The components were assessed and the corrected Item-total correlation and alpha if item deleted is presented in Table 3 and Table 4. As can be seen in Table 3, reliability is above 0.8, a very commendable score, indeed. Reliability of the CETSCALE is higher than that of all the other scales used in this study. As can be seen in Table 4, all the item-to- total correlations are more or less significant. As all item-to-total correlations are above 0.40 and few of them are above .35. The alpha values can't be improved by deleting any of the items; therefore all the items were retained. Hence, hypothesis 2 is accepted that is CETSCALE has internal consistency.

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
.849	17

Table 4: Item –Total Correlation

No. of Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	.456	.841
2	.403	.844
3	.553	.835
4	.506	.838
5	.362	.845
6	.359	.846
7	.516	.838
8	.559	.835
9	.549	.836
10	.449	.841
11	.498	.839
12	.357	.847
13	.526	.837
14	.479	.840
15	.420	.843
16	.369	.848
17	.537	.837

4.4. Unidimensionality of Scale

(Hattie, 1985) expressed that Unidimensionality refers to the existence of a single trait or construct embedded in a set of measures. The significance of Unidimensionality lies in the fact that a set of items forming an instrument should all measure just one thing in common. Gerbing and Anderson (1988) recommended that not only should all the indicators "that define a scale provide estimates of exactly one factor, but the meaning of the underlying factor should correspond to the construct of interest" (p.191). Thus, the Cetscale must have internal and external

validity and reliability, which has already been proved in earlier sections of this paper.

Before proceeding for factor analysis, factorability was tested. In correlation matrix all the correlations below diagonal were less than .5 and significant at .05 level of significance. To assess Measure of Sampling Adequacy (MSA), Anti Image was assessed. All the MSA were ($>.7$) which proves that data is quite eligible for factor analysis. The results of the exploratory factor analysis given in Table 5 shows, the KMO values are commendable (>0.8). The percentage of variance extracted is 56.16%. Four factors have been extracted which rejects hypothesis 2 that is Cetscale is Unidimensional. For factor loadings, the commonly accepted value is .3 and above. But in this research a stringent value of .4 (for a sample size of 180) is taken into consideration. The significant factor loading proves convergent validity. The four-dimensional model appreciably fits the data better than the unidimensional model. This result is consistent with the previous research findings (Bawa, 2004).

Table 5: Exploratory Factor Analysis

KMO	.819 (p=.000)
Total Variance Extracted	56.16%

Items	Factor Loading				Communalities
	Factor 1	Factor 2	Factor 3	Factor 4	
1	.443		.464		.541
2		.727			.594
3		.724			.621
4		.524			.446
5			.617		.510
6			.747		.595
7	.525		.552		.699
8	.655				.563
9	.677				.549
10		.564			.628
11	.672				.535
12				.747	.597
13	.634				.471
14	.563				.604
15				.650	.516
16		.576			.605
17	.641				.472

For each item, the highest factor loading is reported. The cross loadings are also reported if it is $<.3$. Analysis was done using common factor analysis (with principal axis factoring). These are rotated factor loadings obtained using varimax rotation.

4.5. Discriminant Validity

To assess the discriminant validity, it was assumed that the correlations between the dimensions of CETSCALE are low. Hypothesis 4 relates to discriminant validity of Cetscale, as can be seen from Table 6, there is low correlation between the dimensions of the CETSCALE, clearly indicating that these constructs are distinctively different from each other, providing an evidence of discriminant validity. Hypothesis 4 is accepted (though cross loadings of items 1 and 7 shows some discriminant validity problem).

Table 6: Component Correlation Matrix

Components	1	2	3	4
1	1.000	-.197	.177	.388
2	-.197	1.000	2.899E-02	-6.96E-02
3	.177	2.899E-02	1.000	.146
4	.388	-6.96E-02	.146	1.000

Extraction Method: Principal Component Analysis

4.6. Nomological Validity

It is a form of construct validity. It is the degree to which a construct behaves as it should within a system of related constructs called a nomological net. In this study CETSCALE scores are correlated with all other scores that are of Image of home country, Belief about foreign made products and Quality consciousness scale. The correlation values indicated in table 7 manifests almost as expected. As expected, image about the home country is positively correlated to ethnocentrism. The result also show that, contrary to the earlier research (Bawa, 2004) the belief about foreign product is positively correlated to CETSCALE. It only elucidates that though the Indian youths are ethnocentric but still they have liking towards the foreign product. The scores discern that the correlation of cetscore with Belief about foreign products ($r = .133$) is marginally higher than the Image of home country ($r = .129$) which indicates that no doubt Indian consumers harbor feeling of nationalism but still they are fascinated towards Made in foreign tags. The reasons could be search for status symbol, changing expectations, increased mobility of products from one country to another, and cultural receptiveness to symbolism of brands, rising income, etc. Observation of correlation of cetscore with quality consciousness scores is negative ($r = -.039$), this is an indication that Indians are fascinated towards foreign made products for reasons other than quality. Therefore, Hypothesis 5 is partially accepted.

Table 7: Assessment of Divergent Validity and Nomological Validity of the Cetscale Using Correlations

Scales	R
Impulsiveness	.195
Image of Home country	.129
Belief in foreign made products	.133
Quality consciousness scale	-.039

4.7. Extent of Consumer Ethnocentrism

Hypothesis 6 relates to extent of ethnocentrism, keeping in mind the previous studies conducted and the extent of ethnocentrism measured, results are consistent with all the previous studies, as can be seen from table 8, mean scores of this study (Using Management graduate sample) is 54.92 is consistent with Bawa,(2004) study on University students and Materials Management students as samples, Durvasula (1997) study on college students and University students sample of USA, Vida and Fairhurst (1999) university students of Czech Republic, Shimp & Sharma (1987) crafted with pride(The only exception is the result in Russia and Hungary where the p value is $>.05$ and critical ratio is more than 1.96).

Table 8: CETSCORES Obtained by Different Studies Using Student Samples

Author and Year	Sample Description	Sample Size	Mean	SD
Shimp and Sharma (1987)	'Crafted with pride'	145	53.92	16.52
Durvasula et al. (1997)	USA (University students sample)	144	50.24	22.85
	Russia (University students sample)	60	32.02	12.47
Vida and Fairhurst (1999)	Czech Republic	131	45.17	11.97
	Estonia	179	53.59	13.79
	Hungary	76	43.30	13.76
	Poland	172	50.61	14.33
Bawa (2004)	University Students	103	52.43	16.81
	Materials management professionals	58	55.24	25.12
	Senior secondary school students	175	78.71	19.40
Singh and Kewlani (2012)	Post Graduate Students (MBA)	180	54.92	17.62

Findings contradicts the generally held notion that ethnocentrism is a phenomenon of developed world.

4.8. Dimensionality Check

Confirmatory factor analysis (CFA) was performed on the CETSCALE for determining the dimensionality of the scale using AMOS software. While using CFA, researchers are usually advised to report three types of fit namely absolute fit, comparative fit, and parsimonious fit (Kelloway, 1998). The rule of thumb for good fit models are, among others, non significant chi-square results, values >0.9 for goodness of fit index (GFI), comparative fit index (CFI), normed fit index (NFI) and non normed fit fix (NNFI), value >0.8 or >0.9 for adjusted goodness of fit index (AGFI), value <0.10 for root mean square error of approximation (RMSEA), and value <0.05 for root mean square residual (RMSR). The parsimonious normed fit index (PNFI) and the parsimonious goodness of fit index (PGFI) should be high. The standardized residuals should not be greater than 2.58 (Kelloway, 1998; Sharma, 1996; Lindquist *et al.*, 2001).

CFA output for 4 factor model shows Chi –Square 175.9 (p is significant with value of .000)for 113 degree of freedom (thus giving Chi-square to degree of freedom ratio of 1.55, which is well within the range of maximum value of 5),GFI is .85,CFI is .881, NFI is .736 and RMR is .076, RMSEA is .06. Though the output is significant showing poor model fit (but is expected with the large sample size), however the ratio of Chi-square to degree of freedom is well below the stipulated value of 5 moreover GFI and CFI and other fit indices suggest decent fit for 4 dimensional model.

As is evidenced in the Exploratory Factor analysis, items 1 and 7 show cross loading on factors 1 and 3, thus showing some discriminant validity problem. The model stability is assessed for 2 models. One with items showing cross loading and the other model with no cross loading (item is assigned to the factor with high loading, thus both the items are assigned to factor 3).The model fit is arrived at using Largest Lagrange multiplier (also referred to as Modification Index) and Standard Covariance Residual with items having residual less than .4 were deleted. The output of the two models is depicted in table 9.

Table 9: Fit Indices for 2 models

S.No.	Indicator	Model without Cross Loading	Model with Cross Loading
1	χ^2	291.52	289.52
2	Degree of Freedom	197	197
3	P Value	.000	.000
4	χ^2/df ratio	1.46	1.47
5	RMR	.093	.092
6	GFI	.826	.827
7	AGFI	.779	.778

The output shows that there is a subtle difference between the two model. The model not having any cross loading is marginally better than the model with cross loading, thus model without any cross loading will be preferred (resolving discriminant validity issue to an extent).

Dimensionality of the CETSCALE is assessed through linear causal relationship with Impulsiveness. Impulse buying tendency scale is defined as the “degree to which an individual is likely to make unintended, immediate, and unreflective purchase (i.e. impulse purchase)” (Weun, Jones and Beatty, 1997, p .306). Impulse purchases occur when consumers experience an impulse buying stimulus and then later evaluate that prospective purchase as appropriate (O’Guinn and Faber, 1989). Beyond spontaneity, impulse buying is an intense and exciting urge without regard to the consequence of the purchase decision.

8	PGFI	.650	.644
9	NFI	.635	.638
10	TLI	.811	.809
11	CFI	.837	.837
12	RMSEA	.065	.065

Impulsiveness scale has been taken from the Impulsive Buying Tendency scale developed by (Weun, Jones and Beatty, 1997), which is a 5 item scale anchored on 5 point Strongly Agree- Strongly Disagree Likert Scale. This scale was chosen as it is better than Rook and Fisher (Bearden 1999). It is a unidimensional construct. The reliability of the scale is more than .7.

It is believed that ethnocentric consumers will display impulsive behavior and will be involved in such purchase decisions, as there is a positive correlation between the two constructs (Kewlani,Singh 2012).To check the dimensionality of CETSCALE a model is developed in which ethnocentrism is shown to cause impulsiveness. Various dimensions of ethnocentrism were tested (1 through 4) on the collected data and the model fit is reported in the table 10.

Table 10: Depicting Structural Model indicators for Assessing the Dimensionality of Cetscale

S.No	INDICATOR	UNI-	BI-	TRI-	TETRA-
		DIMENSIONAL (Durvasulaet et.al 1997, Sharma et.al 1995/Netemeyer et .al 1991)	DIMENSIONAL (T.Ramyah et.al 2011)	DIMENSIONAL (Bawa 2004)	DIMENSIONAL (Author 2012)
1	Chi-Square	411.7	373.3	366	431.3
2	Degree of Freedom	208	206	203	205
3	Chi-Square Probability	0	0	0	0
4	Ratio of Chi-Square to Degree of Freedom	1.97	1.81	1.803	2.1
5	Goodness of Fit	0.772	0.772	0.779	0.77

(GFI)					
6	Root mean square error of Approximation (RMSEA)	0.089	0.085	0.085	0.094
7	Comparative Fit Index (CFI)	0.686	0.706	0.714	0.645
8	Normed Fit Index (NFI)	0.52	0.533	0.542	0.503
9	Standardized Residual > 2.58	3	2	4	0

The table above shows the output of Dimensionality check for the various models proposed by early researchers, using AMOS software. The Chi-square of 4 dimension model proposed by the author has a higher value as compared to other dimensions, lower the value better is the model fit- Hair et al. (2006). Degree of freedom is modest, the probability shows significant ratio of Chi-Square to degree of freedom lower than 5,. Regarding the goodness of fit indicators GFI, CFI and NFI are far from .9 values, though GFI, and CFI are moderately closer to the stipulated value, NFI is far off from .9. Regarding the residual value of RMSEA, it should be around .05 the output is not very different. The standardized residual > 2.58 is nil in 4 dimensional model proposed by the author. Thus the proposed model shows moderate fit.

4.9. Scale Refinement:

The model is subjected to refinement using Structural model as mentioned above. The final output of the model after deleting the items is shown below in table 11.

Table 11: Fit Indices for Refined Scale

Indicators	Items Deleted	χ^2	Degree of Freedom	P Value	χ^2/df ratio	RMR	GFI	AGFI	PGFI	NFI	TLI	CFI	RMSEA
Values	5,14,10,13	168.2	125	0.006	1.34	0.094	0.871	0.823	0.636	0.69	0.861	0.887	0.056

The table 11 shows that model fit is comparable to Bawa (2004) for University students, but it differs in the items deleted. In this research 4 items deleted where as Bawa reported deleting 6 items (deleting items 2, 4, 5, 6, 7, 10). Regarding model fit though the p value is showing significant difference yet the ratio is well below the stipulated value of 5 showing decent fit. Also GFI, AGFI, CFI and RMSEA show the decent fit for the refined scale.

5. Discussion and Implications

The construct of Consumer Ethnocentrism is not conceptually equivalent to the concept of Consumer Ethnocentrism, which prevails in foreign countries, where this scale is found unidimensional. But the concept is

found equivalent within the country boundaries, and the current study results are in line with the results of previous research, where Bawa (2004) reported four factor solution of CETSCALE for students' sample, however it is inconsistent for reporting negative correlation with belief about foreign made product. As specified in previous works, it would be wrong to view consumer ethnocentrism as a preserve of the developed world, which is once again proved in this research.

With opening up of the economy and government's commitment to provide FDI in multi brand retailing, the general resentment shown throughout the nation stems from the lack of understanding of Indian consumers choice and preference between Indian brands vis a vis foreign brands. Positive relation, between the two constructs in this paper shows the time effect on ethnocentric belief in our country. Findings suggest that ethnocentrism is in its nascent stage and is in a state of transition, where apart from preferring domestic products consumers are equally inclined towards foreign products, perhaps they are treating the product on merit, and ignoring the "made in tags". The Indian manufacturers need not to worry as still Indians are full of jingoistic feeling, are loyal for the country and have high self image, so there is a way out to convert the challenges into opportunities by planning and adopting appropriate strategies to sell their products. The study on the topic reveals that as the country develops, as the economy becomes strong, the consumer's faith in their country's product increases, thereby enhancing ethnocentrism.

6. Limitation and Direction for Future Research

Till date many researchers have used students as their sample of study, although as per Durvasuala et. al, (1997); Douglas et, al., (1994) students provide homogeneity in the sample, but the other side of the coin is that students are the leaders of tomorrow's therefore their opinion, choice and preference is important (Evans and Birch, 1994). It would be worthwhile to study the different age group people of central region of India. Youths with different cultures could be a choice of study in future. Attitudinal and behavioral changes, along with the influence of culture in the same group of sample can also be studied in future. A longitudinal study in a rapidly changing environment of central India is a recommendable proposition. Sample size used in this research is small, which can be enlarged to enhance the generalizability of the findings.

7. References

1. Adorno, T W; Brunswick, Else Frenkel; Levinson, Daniel S and Nevitt, Standford R (1950). *The Authoritarian Personality*, New York: Harper and Row.
2. Agbonifoh, Barnabas A and Eliminian, Jonathan U, (1994). "Attitudes of Developing Countries towards 'Country-of- origin' Products in an Era of Multiple Brands," *Journal of International Consumer Marketing*, 11(4), pp. 97-116.
3. Ahmed, Kishwar (1979). "A Study of the Closed Mind in Relation to Authoritarianism, Conservatism and Rigidity and Familial Antecedents within the Indian Context," *Unpublished Doctoral Thesis, Department of Psychology*, Punjab University.
4. Batra, Rajeev; Ramaswamy, Venkatram; Alden, Dana L; Steenkamp, Jan-Benedict E M and Ramachander, S (2000). "Effects of Brand Local and Nonlocal Origin on Consumer Attitudes in Developing Countries," *Journal of Consumer Psychology*, 9(2), pp. 83-95.
5. Baumgartner, G. and A. Jolibert, (1978). "The perception of foreign products in France" In H. Keith Hunt, editor, *Advances in consumer research*. Provo, Utah: Association for Consumer Research, pp. 603-605.
6. Bawa, Anupam, (2004). Consumer Ethnocentrism: CETSCALE Validation and Measurement of Extent, *Vikalpa*, 29(3), pp. 43-57.
7. Bearden, William O. Netemeyer, Richard G. (1999). "*Handbook of Marketing Scales-Multi-item measures for Marketing and Consumer Behavior Research*", 2nd edition, Sage Publication, New Delhi.
8. Bilkey, W, and Nes, E (1982), "Country-of-Origin Effects on Product Evaluations," *Journal of International Business Research* 13(1), pp. 89-99.
9. Cateora, P, (2000), *International Marketing: European edition*, Irwin: McGraw-Hill.
10. Dickman, S.J. (2000). Impulsivity, arousal and attention. *Personality and Individual Differences*, 28 (5), pp. 563-581.

11. Douglas, Susan P and Nijssen, Edwin J (2002). "On the Use of 'Borrowed' Scales in Cross National Research: A Cautionary Note," *International Marketing Review*, 20(6), pp. 621-642.
12. Durvasula, S., Andrews, J.C. and Netemeyer, R.G., (1997), "A Cross- cultural Comparison of Consumer Ethnocentrism in the US and Russia", *Journal of International Consumer Marketing*, 9(4), pp.73-93.
13. Ettenson, R. and G. Gaeth, 1991. Consumer perceptions of hybrid (bi -national) products. *The Journal of Consumer Marketing*, 8(4), pp. 13-18.
14. Gerbing, D.W. and Anderson, J.C. (1988) "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment" *Journal of Marketing Research*, 25(2), pp.186-192.
15. Good, Linda K and Huddleston, Patricia (1995). "Ethnocentrism of Polish and Russian Consumers: Are Feelings and Intentions Related?" *International Marketing Review*, 12(5), pp. 35-48.
16. Hair, J.F., R.E. Anderson, R.L. Tatham and W.C. Black, 2006. *Multivariate data analysis*, 6th Eds. Upper Saddle River, NJ: Prentice Hall.
17. Han, C.M. and V. Terpstra, 1988. Country of origin effects for uni-national and bi-national products. *Journal of International Business Studies*, 19(1), pp. 235-255.
18. Hattie, J. (1985), "Methodological Review: Assessing Unidimensionality of Tests and items", *Applied Psychological Measurement*, 9(6), pp.139- 164.
19. Haviland, John B. (1993) Anchoring, iconicity, and orientation in Guugu Yimidhirr pointing gestures. *Journal of Linguistic Anthropology* 3(10), pp. 3-45.
20. Herche, Joel (1994). "Ethnocentric Tendencies, Marketing Strategy and Import Purchase Behaviour," *International Marketing Review*, 11(3), pp.4-16.
21. Heslop, L.A. and N. Papadopoulos, 1993. But who knows where or when: Reflections on the images of countries and their products, in Papadopoulos, N. & Heslop, L. (Eds.). *Product-country images: Impact and role in international marketing*. International Business Press (Haworth), New York, pp: 39-75.
22. Jacoby, J, (1978), "Consumer Research: A State of the Art Review", *Journal of Marketing*, 42(2), pp. 87-96.
23. Johansson, Johnny K., Susan P. Douglas, and Ikujiro Nonaka (1985), "Assessing the Impact of Country of Origin on Product Evaluations: A New Methodological Perspective," *Journal of Marketing Research*, 22 (11), pp.388-96.
24. Kasomo D (2010). *Challenges to Evangelization in Africa Today: African Independent Churches*. Berlin: Lambert Academic Publishing.
25. Kaynak, Erdener and S. Tamer Cavusgil (1983), "Consumer Attitudes towards Products of Foreign Origin: Do They Vary Across Product Classes?" *International Journal of Advertising*, 2(5), pp.147-57.
26. Kelloway, E Kevin (1998). *Using LISREL for Structural Equation Modeling: A Researcher's Guide*, New York: Sage Publications.
27. Kewlani. S and Singh. S (2012), "Study on the three way influence of self concept, ethnocentrism and impulsiveness on consumer's exploratory tendencies." *Asian Journal of Management Research*. 3(1), pp. 139-152.
28. Klein, J. G. (2002), Us versus them, or us versus everyone?-Delineating consumer aversion to foreign goods." *Journal of International Business Studies*. 33(2), pp. 345-363.
29. Klein, Jill Gabrielle, Ettenson, Richard and Morris, Marlene D (1998). "The Animosity Model of Foreign Product Purchase: An Empirical Test in the Peoples Republic of China," *Journal of Marketing*, 62(1), pp. 89-100.
30. La Barre, Polly (1994). "Quality's Silent Prayer," *Industry Week*, 243(8), pp.47-48.
31. Lantz, G., and S. Loeb. 1996. Country of origin and ethnocentrism: An analysis of Canadian and American preferences using social identity theory. *Advances in Consumer Research* 23(8), pp. 374-378.
32. LeVine, Robert A., and Donald T. Campbell. 1972. *Ethnocentrism*. New York: John Wiley.
33. Lindquist, Jay D; Vida, Irena; Plank, Richard E and Fairhurst, Ann (2001). "The Modified CETSCALE: Validity Tests in the Czech Republic, Hungary and Poland," *International Business Review*, 10 (5), pp. 505-516.
34. Luque-Martinez, T., J.A. Ibanez-Zapata and S.D. Barrio-Garcia, 2000. Consumer ethnocentrism measurement: an assessment of the reliability and validity of the CETSCALE in Spain. *European Journal of Marketing*, 34(11/12), pp. 1353-1373.

35. Marcoux, J.S., Filiatrault, P. and Chéron, E.(1997), "The Attitude Underlying Preferences of Young Urban Educated Polish Consumers Towards Product Made- in Western Countries", *Journal of International Consumer Marketing*, 9(4), pp.5-29.
36. Mavondo, Felix T. and Angeline Su Kien Tan. Re-conceptualizing the CETSCALE (Consumer Ethnocentric Tendency Scale). Paper- Monash University.
37. Mohammad, Osman, Ahmed, Zafar U; Earl D Honeycutt, Jr and Tyebkhan, Taizoon Hyder (2000). "Does 'Made in ...' Matter to Consumers? A Malaysian Study of Country of Origin Effect," *Multinational Business Review*, 8(2), pp. 69-73.
38. Mulye, R, Rickard, J., and Higginson, T., (1997). "Some Evidence of Consumer Ethnocentrism in Australia", *Journal of the Australian and New Zealand Academy of Management*, 3(2), pp. 1-11.
39. Nagashima, A., 1977. A comparative 'Made-in' product image survey among Japanese businessmen. *Journal of Marketing*, 6(1), pp. 95-100.
40. Netemeyer, M., Durvasula, S., and Lichtensten, D, (1991), 'A Cross-National Assessment of the Reliability and Validity of the CETSCALE," *Journal of Marketing Research*, 18(8), pp. 320-7.
41. Nijssen, Edwin J, Douglas, Susan P and Bressers, Paul (2002). "Attitudes Towards the Purchase of Foreign Products: Extending the Model," Working paper, Stern School of Business.
42. O'Cass, A. and K. Lim, (2002). Understanding the younger Singaporean consumers' views of western and eastern brands. *Asia Pacific Journal of Marketing and Logistics*, 14(4), pp. 54-79.
43. O'Guinn, Thomas C., & Faber, Ronald J. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research*, 16(1), pp. 147-157.
44. Okechuku, C, (1994), "The Importance of Product Country of Origin: A Conjoint Analysis of the United States, Canada, Germany and the Netherlands", *European Journal of Marketing*, 28(4), pp.5-19.
45. Okechuku, Chike (1994). "The Importance of Product Country of Origin: A Conjoint Analysis of the United States, Canada, Germany and the Netherlands," *European Journal of Marketing*, 28(4), pp. 5-19.
46. Orth, U. R. & Girbasova, Z. (2003), "The role of consumer ethnocentrism in food product evaluation". *Agribusiness*. 19(2), pp.137-147.
47. Papadopoulos, N.G., L.A, Heslop, E, Graby and G, Aavlonitis (1987), "Does 'Country of Origin' Matter? Some Findings from a Cross Cultural Study of Consumer Views about Foreign Products", Marketing Science Institute, Cambridge: MA.
48. Papadopoulos, Nicolas, Heslop, Louise A and Beraes, Jozsef (1990). "National Stereotypes and Product Evaluations in a Socialist Country," *International Marketing Review*, 7(1), pp.32-47.
49. Parmeswaran, Ravi and Pisharodi, Mohan R (1994). "Facets of Country of Origin Image: An Empirical Assessment," *Journal of Advertising* 23(1), pp. 44-56.
50. Phau, I. and G. Prendergast, 2000. Conceptualizing the country of origin of brand. *Journal of Marketing Communications*, 6(3), pp.159-170.
51. Plank, R.E. and J.D. Lindquist, 1999. Exploring the CETSCALE in Soviet Armenia. In Proceedings of the Ninth Biennial World of Marketing Congress, Global Perspectives in Marketing for the 21st Century. Academy of Marketing Science. Malta, 23-26 June. Malta, pp: 113-118.
52. Ramayah, Mohamad, and Young and Lo., (2011). "Testing the dimensionality of Consumer Ethnocentrism Scale (CETSCALE) among a young Malaysian consumer market segment," *African Journal of Business Management*, 5 (7), pp. 2805-2816.
53. Reiersen, C.C., 1966. Are Foreign Products Seen as National Stereotypes? *Journal of Retailing*, 42(4), pp. 33-40.
54. *Review of Retail Distribution and Consumer Research*, 90(4), pp.321-337.
55. Reynolds, V., Falger, V., & Vine, I. (Eds.) (1987). *The Sociobiology of Ethnocentrism*. Athens, GA: University of Georgia Press.
56. Saffu K, Walker J., (2006). The Country-of-Origin effects and consumer attitudes to "buy local campaign: *The Ghanaian Case*. 7 (1/2), pp. 183-199.
57. Sharma, S., Shimp, T, and Shin, J, (1995) 'Consumer Ethnocentrism: A Test Antecedents and Moderators' *Journal of the Academy of Marketing Science* 23(1), pp 26-37.
58. Sharma, Subhash (1996). *Applied Multivariate Techniques*, New York: John Wiley & Sons.
59. Sharma, Subhash, Terence A. Shimp, and Jeong Shin. (1995). "Consumer Ethnocentrism: A Test of Antecedents and Moderators." *Journal of the Academy of Marketing Science*, 23(1), pp. 26-37.
60. Shimp, T., and Sharma, S., (1987), "Consumer Ethnocentrism: Construction and Validation of the CETSCALE", *Journal of Marketing Research*, 23(1), pp.280-9.

61. Sproles, George B and Kendall, Elizabeth (1986). "A Methodology for Profiling Consumers' Decision Making Styles," *Journal of Consumer Affairs*, 20(2), pp. 267-279 as quoted in Bearden and Netemeyer (1999).
62. Stein, G., (1987), "The Biological Bases of Ethnocentrism, Racism and Nationalism in National Socialism", *The Sociology of Ethnocentrism: Evolutionary Dimensions of Xenophobia, Discrimination, Racism and Nationalism* pp. 251-257,
63. Sumner, W. G., (1906). *Folkways: The Sociological Importance of Usages, Manners, Customs, Mores and Morals*, New York: Geni and Co. as quoted in Luque-Martinez, Ibanez- Zapata and Barrico-Garcia, (2000).
64. Vida, I and Fairhurst, A., (1999). "Factors Underlying the Phenomenon of Consumer Ethnocentricity: Evidence for Four Central European Countries," *The International Review of Retail Distribution and Consumer Research*, 90(4), pp.321-337.
65. Weun, Seungoo, Michael A. Jones, and Sharon E. Beatty., (1997). "A parsimonious Scale to Measure Impulse Buying Tendency." In W.M. Pride and G. T. Hult (Eds.), *AMA Educators Proceedings: Enhancing Knowledge Development in Marketing* (pp 306-307). Chicago: American Marketing Association.
66. Zhou, L. & Hui, M. K., (2003), Symbolic value of foreign products in the People's Republic of China. *Journal of International Marketing*. 11(2), pp. 36-43.