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A structural equation model describes factors affecting Greek students' consumer behavior

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Abstract

Consumer ethnocentrism has enormous importance in international management and marketing area. Consumer ethnocentrism is strongly connected with xenophobia, morality and rationality, patriotism nationalism and economic and war animosity elements. CETSCALE (Consumer Ethnocentric Tendencies Scale) (Shimp and Shara, 1987) was developed to evaluate emotional dimension of purchasing imported goods regarding the implication to economic animosity, rationality and morality. Patriotism and Nationalism Scale (Kosterman and Feshbach's, 1989) was developed scale to evaluate levels of patriotism. Animosity Scale (Klein et al., 1998) was developed to evaluate levels of animosity, such as general dislike for a country, war and the economic animosity. In the current study, a total of 200 students from the department of Nursery Education of the University of Western Macedonia filled in the three scales. The study proposes a structural equation model which describes factors affecting Greeks students' consumption punching behavior, such as: xenophobia, morality and rationality in respect of ethnocentrism, patriotism and nationalism and economic and war animosity. In addition it evaluates its construct validity by estimating both convergent and discriminant validity, while evaluating the internal consistency of the proposed model itself, and estimates how the instrument determines the reasonable relations among the latent factors mentioned above, and how it describes the reasonable results and assigns the quality of data fit within it. The specific model can be used by researchers to evaluate the effect of different aspects of ethnocentrism in the market economy.

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1. Introduction

In the era of an economic crisis ethnocentric, racism even fascistic attitudes and behaviors can be emerged.

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Greece suffers from a dangerous fiscal crisis and ethnocentric actions, even violent ones, towards legal and illegal immigrants and refugees, both regulations and products for instance, are appeared in many circumstances. Not only political parties but ordinary people put the blame of unemployment on immigrants. In addition, purchasing imported products is another important factor with enormous consequences in the economy and employment. Research on consumer evaluation of foreign products has shown that consumer ethnocentrism, nationalism patriotism and animosity are key variables in marketing area (Anastasiadou and Florou, 2013).

Consumer ethnocentrism is strongly related to appropriateness of purchasing foreign made products, to superiority of domestic products, to domestic economy harm superiority to other nations, to unemployment, to unpatriotic behavior (Shimp and Sharma, 1987), to feeling of superiority regarding other nation (Carvalho, 2005).

Patriotism is related to healthy love for or devotion to one's country (Albarq and Nik Mat, 1995; Kosterman and Feshbach, 1989), to feeling of pride in one's nation (Kosterman and Feshbach 1989) and loyalty and belonging to one's nation (Balabanis et al., 2001).

Animosity is related to antipathy, hostility and opposition toward a country due to previous or ongoing military, political or economic actions (Klein et al., 1998).

Ethnocentrism, patriotism and animosity can differentiate consumers behaviors toward purchasing foreign or domestic made products. Thus study evaluates ethnocentrism, patriotism and animosity influence on Greek students' consumer behavior.

2. Purpose of the study

The study proposes a structural equation model which describes factors affecting Greeks students' consumption punching behavior, such as: xenophobia, morality and rationality in respect of ethnocentrism, patriotism and nationalism and economic and war animosity. The study tests the propose model for Convergent and Discriminant Validity. Also the model is tested for its Reliability.

3. Method

3.1. Participants

The sample was 200 students from the department of Nursery Education of the University of Western Macedonia. 8 (4%) were males and 192 (96%) females. As regards the year of studies, 142 (71%) were first year students, 29 (14.5%) second year, 5 (2.5%) third year, 40 (10%) fourth years students and finally 4 (2%) were before graduation.

3.2. Instruments

The instrument CETSCALE: Shimp and Sharma developed a 17-item scale to evaluate consumers' ethnocentric tendencies and called it CETSCALE (Consumer Ethnocentric Tendencies Scale). The scale seeks to clarify emotional dimension of purchasing imported goods regarding the implication to economic animosity, rationality and morality. More specifically, CETSCALE evaluates the degree to which consumers feel that the purchase of foreign products is unpatriotic and immoral because it threatens the domestic economy and cause the loss of jobs. The 17 items of CETSCALE items were of a likert type and extended from 1 for total disagreement to 5 for absolute agreement (e.g. Greek people should always buy Greece-made products instead of imports; only those products that are unavailable in Greece should be imported).

The instrument of Patriotism and Nationalism: Kosterman and Feshbach's (1989) developed a 12-item scale to evaluate levels of patriotism (Patriotism and Nationalism Scale). All of the items made statements about patriotism in regards to feelings about the flag, country pledge of allegiance or countrymen. The 12 items of Patriotism and Nationalism Scale were of a likert type extended from 1 for total disagreement to 5 for absolute agreement (e.g. I love my country; I am proud to be a Greek).

The instruments of Animosity Scale: Klein et al. developed a 9-item scale to evaluate levels of animosity (Klein et al., 1998). All of the items made statements about animosity in regards to feelings about the general dislike for a country, the war animosity and the economic animosity. The 9 items of Animosity Scale were of a likert type

extended from 1 for total disagreement to 5 for absolute agreement (e.g. I dislike the Germans; I feel angry towards the Germans). Germany was chosen as an animosity country due to fact that Greece was involved with Germany in the Second World War, thus Greeks may have war animosity emotions and Germany ‘ economic role in the in the European Union and thus Greeks may have economic animosity emotions.

4. Results

The questionnaires used in this study were adopted from previous study. Five point Likert scales are used ranging from strongly disagree to strongly agree. The questionnaires consist of seven components (Anastasiadou and Florou., 2013). The first three, Xenophobia (F1), Morality (F2), and Rationality (F3) resulted from Principal components analysis of the CETSCALE constructed by (Shimp and Sharma, 1987). The next two, Patriotism (F4), Nationalism (F5) resulted from Principal components analysis of the Patriotism and Nationalism Scale (Kosterman and Feshbach’s, 1989). Finally the last two Economic Animosity (F6) and War Animosity (F7) resulted from Principal components analysis of the Animosity Scale: (Klein et al., 1998). These components and their items are presented analytically in table 1 (Table 1).

Table 1: Items

	COMPONENTS	Loadings
CETSCALE	Xenophobia (F1)	
	q5: Purchasing foreign-made products is un-Creek.	0.736
	q17: Greek consumers who purchase products made in other countries are responsible for putting their fellow Greeks out of work.	0.646
	q11: Greeks should not buy foreign products, because this hurts Greek business and causes unemployment.	0.641
	q14: Foreigners should not be allowed to put their products on our markets	0.633
	q6: It is not right to purchase foreign products, because it puts Greeks out of jobs.	0.584
	q7: A real Greek should always buy Greek-made products.	0.561
	Morality (F2)	
	q9: It is always best to purchase Greek products.	0.784
	q10: There should be very little trading or purchasing of goods from other countries unless out of necessity.	0.702
	q1: Greek people should always buy Greece-made products instead of imports.	0.552
	q4: Greek products, first, last, and foremost.	0.534
	q8: We should purchase products manufactured in Greece instead of letting other countries get rich off us.	0.529
	q2: Only those products that are unavailable in Greece should be imported.	0.480
	Rationality (F3)	
	q16: We should buy from foreign countries only those products that we cannot obtain within our own country	0.675
	q3: Buy Greek-made products. Keeps Greece working?	0.665
	q15: Foreign products should be taxed heavily to reduce their entry into Greece.	0.600
	q12: Curbs should be put on all imports	0.520
q13: It may cost me in the long-run but I prefer to support Greek products.	0.518	
Patriotism and nationalism scale	Patriotism (F4)	
	q1:I love my country.	0.712
	q2: I am proud to be a Greek.	0.651
	q5:I feel great pride in that land that is our Greece	0.618
	q4: Although at times I may not agree with the government, my commitment to the Greece	0.588

	always remains strong.	
	q7: When I see the Greek flag flying I feel great	0.587
	q3: In a sense, I am emotionally attached to my country and affected by its actions.	0.583
	Nationalism (F5)	
	q6: It is that important for me serve my country.	0.812
	q8: The fact that I am Greek is an important part of my identity.	0.724
	q11: It bothers me to see children made to pledge allegiance to the flag or sing the national anthem or otherwise induced to adopt such strong patriotic attitudes.	0.714
	q10: In general, I have a lot of respect for the Greek people.	0.583
	q9: It is constructive for one to develop an emotional attachment to his/her country.	0.554
	q12: The Greece is not really just an institution, big and powerful yes, but not just an institution	0.508
	Economic Animosity (F6)	
Animosity Scale	q6: Germany wants to gain economic power over my country.	0.845
	q8: Germany has too much economic influence in my country.	0.809
	q7: Germany is taking advantage of my country.	0.789
	q5: Germany is not a reliable trading partner.	0.767
	q9: Germany is doing business unfairly with my country.	0.738
	War Animosity (F7)	
	q2: I feel angry towards the Germans	0.793
	q3: I will never forgive Germany for its massacres in the Second World War.	0.781
	q4: Germany should pay for what it did to Greeks during the occupation.	0.702
	q1: I dislike the Germans.	0.663

At this point we should add that as all items loaded more heavily on their corresponding constructs rather than on other constructs, discriminant validity was satisfied. In addition, the square roots of all AVEs were larger than correlations among constructs, thereby satisfying discriminant validity (Table 2).

In addition the average extracted variances are all above the recommended 0.50 level (Hair et al. 1995), which implies convergent validity.

Compared to Cronbach's alpha equal to 0.818, 0.768, 0.709, 0.845, 0.819, 0.876, and 0.821 for the F1, F2, F3, F4, F5, F6 and F7 component respectively assumes equal weights of all the items of a construct and is influenced by the number of items. Composite Reliability relies on actual loadings to compute the factor scores, and thus provides a better indicator for measuring internal consistency. As shown in the next Table, Composite Reliabilities are above the threshold of 0.7. In conclusion, the measures in this study are reliable and valid.

Table 2: Composite reliability (CR) and average variance extracted (AVE)

	Composite Reliability (CR>0.7)	Average Variance Extracted (AVE>0.5)
Xenophobia F1	0.845	0.839
Morality F2	0.797	0.769
Rationality F3	0.765	0.731
Patriotism F4	0.867	0.858
Nationalism F5	0.895	0.892
Economic Animosity F6	0.892	0.867
War Animosity F7	0.829	0.816

Yet, all the inter-constrst correlations are below the cutoff point of 0.9, which suggest distinctness in discriminant validity (Table 3).

Table 3: Inter-constrst correlations

	Xenophobia F1	Morality F2	Rationality F3	Patriotism F4	Nationalism F5	Economic Animosity F6
Morality F2	0.13					
Rationality F3	0.09	0.15				
Patriotism F4	0.29	0.16	0.28			
Nationalism F5	0.12	0.31	0.18	0.32		
Economic Animosity F6	0.15	0.21	0.14	0.20	0.23	
War Animosity F7	0.08	0.03	0.04	0.02	0.04	0.12

Model estimation is tested through structural equation modelling technique (SEM) by LISREL 8.8. Software. Model estimation was done using the Maximum Likelihood Estimation, with the item covariance matrix used as an input. The indicators/ indexes were identified on the basis of their loadings. These indicators are associated to their respective latent or unobserved variables to calculate the estimate. The values of SEM are given below.

Table 4: Model estimation

Values	CFI	? 2/df	GFI	AGFI	NFI	NNFI	RMSR	RMSEA
Good fit indexes	0.92	1.8	0.83	0.82	0.92	0.97	0.05	0.05

The overall analysis of the model indicates that the model is a very good fit (CFI =0.92, ? 2/df =1.8, GFI=0.83, AGFI=0.82, NFI=0.92, NNFI=0.97, RMSR=0.07, RMSEA=0.05).

5. Conclusions

The basic aim of this study was the confirmation of structural equation model describes factors affecting Greek students' consumer behavior for its reliability and validity. The results confirmed the reliability and validity of the proposed model on a sample of Greek students.

The overall analysis of the model SMS (a structural equation model), which records the influential factors on the axes of Xenophobia, Morality, Rationality, Patriotism, Nationalism Economic Animosity and War Animosity indicated that the model has a good fit.

References

- Albarq, A. and N, K. Nik Mat. 1995. Determining the Antecedents of Consumer Ethnocentrism in Jordan.
- Anastasiadou S., Florou, G., 2012. Consumer ethnocentrism, patriotism and animosity: The case of Greece students. 3rd International Conference on Quantitative and Qualitative Methodologies, Athens, pp. 52-57.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D. & Melewar, T. C. 2001. The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies. *Journal of International Business Studies*, 32 (1), Pp.157-175
- Carvalho, S., 2005. Understanding consumption as expression of consumer's national identity. Unpublished Ph.D., City University of New York, United States -- New York.
- Klein, J.G., R. Ettenson and M.D. Morris (1998). The Animosity Model of Foreign Product Purchase: An Empirical Test in the People's Republic of Chine. *Journal of Marketing* 62(1), 89-100.
- Kosterman, R., Feshbach, S., 1989. Toward a measure of patriotic and Nationalistic Attitudes. *Political Psychology* 10(2), 63-92.
- Shimp, T. A., and Sharma, S. (1987). Consumer ethnocentrism: Construction and validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280-289 .