Ethical Consumerism in Global Perspective: Generalized Linear Model of Interactions Between Individual-Level Predictors and Country Level Affluence *

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Abstract

Recently scholars have demonstrated the importance of structural and cultural contexts to the explanation of ethical consumerism. So far most of this research has been contained within Wester Countries, limiting potentially important country-level variation such as economic, social/cultural, political factors. Because theories of ethical consumerism suggest interactive relationships between individual- and macro-level variables, research across all levels of analysis in global perspective is required to conduct. This study uses the 2014 citizenship module of the International Social Survey Program (ISSP) - a data set that includes 34 countries - to set Generalized Linear Model with cross-level interactions between country-level affluence and individual-level predictors.

Keywords: Ethical consumerism, Interaction effect, Generalized linear model

1. Introduction

Although it has been only a few years to try academic approaches on consumerism, consumers in the world have been grounded on their own political, ethical, and moral beliefs when making decisions in the market from a long time ago. Early research on it was focused on individual factors like political, ethical, or environmental factors associated with either instant purchase or purchase avoidance. Since advanced research was carried out mostly in Europe, it is limited in explaining difference between countries. In other words, Europe-based research is problematic in generalizing theories, so it is needed to pay attention to non-Western culture, too. For example, in Korea, if an item's country of origin is Korea or Japan, it exhibits significant difference in meaning [1]. The aim of the present study was to set a generalized linear model with moderating effect between country-level affluence and individual-level predictors. This study uses the 2014 citizenship module II of the International Social Survey program (ISSP) - a data set that allows for increased country level heterogeneity while maintaining the highest standards of data quality.

1.1. Concept of consumerism

Consumerism is defined diversely by scholars. However, commonly, consumerism is regarded as consuming behavior to practice social responsibility according to a consumer's personal moral beliefs [2]. In brief, consumerism is not an individual's private behavior of consumption but decision making in consideration of the influence over the society or even the broader range [2]. Also, consumers reveal consumerism as instant behavior. Sometimes, they buy consumer goods immediately as a positive compensation for a particular company, and sometimes, they refuse to buy consumer goods as in boycotting. Cooper-Martin and Holbrook defines ethical consuming behavior as something that is influenced by ethics while consumers make decisions, purchase, or have consuming experience [3].

1.2. Individual factors that influence consumerism

Regarding individual factors, consumerism depends on demographic characteristics. To put it concretely, there are factors like age, gender, income, social capital, norms, efficacy and trust levels. In detail, norms are seen as crucial "motivational" factors, when dealing with consumerism. Adding on, social capital is defined in diverse ways; however, the core value of it is trust and solidarity. Trust towards political organs influences political consumption. In other words, trust towards the organs may lead to political consumption. Once consumers believe that their behavior is supported by political organs, they begin to act. [4] reports that a sense of belonging to a club, socio-cultural group, or church pushes the person for new participation in politics either positively or negatively and it influences political consumption as well. According to Neilson and Paxton association involvement effects people when making consumption decisions and motivates people to act [5]. In fact, association involvement mainly focuses on the relationship and transmission of information and this will increase people to act normatively. Therefore, through preceding research analysis, it its clear to say that individual factors influence consumerism.

1.3. Contextual factors that influence consumerism

About contextual factors, national influence forms a large part, but macroscopic factors like the financial condition, political structure (level of democracy), postmaterialists are also crucial. In realtion, Inglehart and Cattergberg's cross-national analysis acknowledges that the pattern varies according to country-level characteristics such as wealth and level of democracy [6]. Adding on, Summers's intercept model for country level variables shows that consumerism is positively and significantly associated with GDP per capita and the present of postmaterialists per country. Regarding postmaterialism, Stolle proves a strong relationship between political consumerism and post materialism [4].

Not only these contextual factors but also boycott can be used as measures of consumerism. In detail, political factors influence consumerism or consumer action(boycott). Many literature reports (including Summer's work which used the same data, ISSP) either on the collective concept of political consumerism or on boycotting [1]. In detail, Neilson's research shows that association involvement and trust in institution are used as factors to predict boycott. Although there are limits of viewing consumerism through boycott, based on past literature reports, this paper uses experience with boycott and its intention to measure consumerism [5].

2. Data and methods

2.1. Data

The International Social Survey Program's (ISSP) 2014 citizenship module II supplies the individual level data for this study. The ISSP is one of the largest (total N 49,807 across 34 countries) and most respected sources of data for performing cross-national analyses, especially when non-Western nations are of interest. After 2004, more than a dozen non-Western countries supplied data to the ISSP, including countries in Eastern Europe, Asia, and Latin America. This allows for the analysis of individual-level data from a much wider array of countries than previously studied by scholars of consumerism.

2.2. Model

Analyses consist of two main parts: (1) the presentation and discussion of generalized linear models that show the effects of both individual-level and country-level variables using link function. (2) Generalized linear model with link function is used to test the interaction effect between individual-level and country-level variables.

Generalized Lindear Model (GLM) uses Maximum Likelihood Estimation (MLE) rather than Ordinary Least Squares (OLS) to estimate the parameters, therefore it relies on large-sample approximations. Unlike regression model, GLM does not assume a linear relationship between the dependent variable and the independent variables, furthermore the homogeneity of variance does not need to be satisfied.

In this study generalized linear models are set using link function which provides the relationship between the linear predictor and the mean of the distribution function.

2.3. Independent variables

(1) Individual-level Measures

Several demographic and resource measures are included: gender, age, household income. The household income that responded to the survey ISSP is divided into quartiles.

Social capital is operationalize with two variables: association membership, perceived trust level. Association membership is included as a summed index of membership in five types of associations: (1) political parties, (2) trade unions, (3) church or other religious organizations, (4) sports, leisure, or cultural groups, and (5) a catch-all category for any other voluntary association. The index is the sum of those five measures, with values ranging from 1 to 5.

Perceived trust is included as quasi continuous, 5 Likert-style measure. The measure is the sum of four types of trust: Degree of trust (1) people in government, (2) politicians, (3) people's effort to fairness, (4) people's credibility.

Efficacy is coded Likert 5 point scale as the sum of two items: the first, a measure of respondent agreement with the notion of respondent influence on what government does and the second a measure of agreement with the statement, "I don't think the government cares much what people like me think."

Personal attitude toward society is a measure of respondent agreement with certain behavior that a good citizen should have, such as voting in elections, never trying to evade taxes, choosing products for environmental reasons, helping less privileged people in Country and the rest of world using Likert 5-point scale as well.

(2) Country-level Measures

Aspects of the political, cultural, and economic opportunity structures are included as well as measures of macro-level variables. Data including each country's GDP, degree of postmaterialism and democracy score were not an original part of the ISSP, but were added subsequently in order to quantify the effect of interaction with Individual-level measures.

Logged GDP per capita from the international Momentary Fund's (IMF) Economic Outlook database serves as the primary operationalization of country-level affluence. Also included is a country-level variable that shows the average degree of postmaterialism of the people in each country, obtained from World Value Survey. Democracy score measured by Polity Project is included. Countries were coded by mapping their democratic index at the time of the ISSP survey, to a scale of 1 to 10.

2.4. Dependent variables

The dependent variable used in this study is a self-reported measure of ethical consumerism. The measure comes from a series of questions about political participation. The ethical consumerism item is "Boycotted, or deliberately bought, certain products for political, ethical or environmental reasons". Boycotting certain products are ranged form 1 (never done, never will do) to 4 (in the past year done).

3. Result

[Table 1] to [Table 3] indicate the descriptive statistics of key variables.

Table 1. descriptive statistics of respondents

		N	%			N	%
gender (n=49783)	Male	23,224	46.6	age (n=49807)	under 29	9,213	18.5
	Female	26,559	53.3		30-39	8,481	17.0
household income (n=37930)	Income level1	10,595	21.3		40-49	8,628	17.3
	Income level2	9,700	19.5		50-59	8,867	17.8
	Income level3	9,751	19.6		60-69	8,011	16.1
	Income level4	7,884	15.8		more than 70	6,607	13.3

Table 2. descriptive statistics of key measurements

		N	Mean	S/D
Dependent Variable	Ethical Consumerism	47,158	2.07	1.14
Individual-level Independent Variable	association involvement	45,378	3.85	.76
	Perceived trust level	45,490	2.15	.77
	efficacy	47,398	2.67	1.11
	personal attitude toward society	42,323	2.84	.68
Country-level Independent Variable	postmaterlism level	26,363	2.62	.28
	logged GDP per capita	49,807	4.37	.41
	Democracy score	49,807	9.05	1.61

Table 3. descriptive statistics of each Country

-	N	Ethical Consumerism (Likert 4 oint scale)		Association involvement		Perceived trust level		Efficacy		Personal attitude toward society	
		mean	S/D	mean	S/D	mean	S/D	mean	S/D	mean	S/D
Austria	1,033	2.70	1.23	2.19	.76	3.05	.63	2.46	1.02	3.80	.83
Austrailia	1,432	2.81	1.15	2.49	.72	3.10	.66	2.73	1.10	4.03	.65

Belgium	2,264	2.45	1.14	2.23	.69	2.90	.65	2.45	1.11	3.58	.82
Chile	1,432	1.39	.77	1.87	.62	2.50	.61	3.17	.82	3.95	.75
Croatia	1,000	1.84	.97	2.12	.65	2.36	.57	1.91	.89	3.96	.67
Czech Republic	1,532	1.98	1.05	2.01	.63	2.67	.59	2.23	1.07	3.57	.77
Demnark	1,758	2.72	1.10	3.00	.65	3.39	.59	2.82	1.20	3.88	.65
Finland	1,505	2.63	1.11	2.64	.65	3.09	.63	2.67	1.15	3.69	.73
France	1,211	2.63	1.20	2.11	.68	2.75	.63	3.36	.84	3.79	.70
Great Britian	1,580	2.33	1.13	2.23	.72	2.96	.62	2.60	1.03	3.81	.74
Georgia	1,498	1.57	.84	1.72	.48	2.58	.62	2.44	1.06	4.27	.65
German	1,718	2.70	1.22	2.28	.72	3.08	.59	2.84	1.12	3.72	.82
Hungary	1,007	1.28	.58	1.59	.46	2.89	.61	2.46	1.06	3.56	.77
Iceland	1,497	2.71	1.11	2.83	.74	3.22	.64	3.19	1.12	3.97	.67
Inda	1,209	2.19	1.02	2.36	.93	2.88	.62	2.57	1.05	3.64	.80
Israel	1,204	1.74	1.04	2.04	.77	2.85	.66	2.44	1.01	3.74	.69
Japan	1,593	1.73	.93	1.68	.54	2.80	.63	3.20	.92	3.73	.70
Korea(South)	1,370	2.01	1.03	2.01	.68	2.82	.57	2.42	.97	3.83	.74
Lithania	1,119	1.45	.79	1.80	.59	2.49	.61	2.29	.94	3.65	.81
Netherland	1,638	2.45	1.09	2.52	.70	3.34	.59	2.86	1.07	3.82	.73
Norway	1,459	2.60	1.14	2.78	.70	3.44	.53	3.29	1.03	3.98	.67
Phillippine	1,200	1.38	.74	1.92	.78	2.88	.56	2.82	.95	4.16	.74
Poland	2,112	1.46	.81	1.92	.54	2.52	.56	2.13	1.00	3.56	.77
Russia	1,600	1.33	.65	1.56	.45	2.92	.58	2.75	.93	3.47	.83
South Africa	3,124	1.58	.82	2.39	.77	2.62	.62	2.38	1.05	3.85	.77
Sloval Republic	1,156	1.73	.87	1.80	.64	2.50	.62	2.30	1.07	3.47	.84
Slovenia	1,010	1.82	1.12	2.00	.64	2.38	.64	1.75	.85	3.89	.70
Spain	1,755	2.13	1.07	1.89	.67	2.59	.68	2.22	1.01	4.21	.62
Sweden	899	3.08	1.09	2.68	.67	3.36	.61	3.06	1.07	3.97	.70
Switzerland	1,235	2.68	1.23	2.39	.75	3.38	.55	3.27	.91	3.92	.61
Taiwan	1,875	2.01	1.07	1.83	.57	2.73	.57	2.72	1.10	3.83	.66
Teurkey	1,509	1.46	.80	1.49	.52	2.52	.58	3.15	1.11	4.46	.56
United State	1,264	2.30	1.16	2.60	.88	2.76	.64	2.65	1.11	4.01	.64
Venezuela	1,009	1.99	1.21	2.25	.85	2.42	.79	3.62	1.21	4.19	.66

Pearson correlation coefficient is used as a measure of reliability and check the risk of multicollinearity. If the absolute value of Pearson correlation is close to 0.8, collinearity is likely to exist. [Table 4] represents the pair wise Pearson's correlation coefficients of each variable.

Table 4. Correlation of key measurements

	association involvement	Perceived trust level	efficacy	personal attitude toward society	post materialism level	logged GDP per capita	Democracy score
association involvement	1						
Perceived trust level	.244***	1					
efficacy	.158***	.350***	1				
personal attitude toward society	.081***	.107***	.169***	1			
post-materialism level	.171***	.108***	.069***	-.035***	1		
logged GDP per capita	.329***	.358***	.162***	.008	.349***	1	
Democracy score	.194***	.133***	-.070***	-.080***	.484***	.389***	1***

*p<.10, **p<.05, ***p<.01

The means for each variables are shown in [Table 5]. T-test and one-way ANOVAs reveal significant differences for each individual-level independent variables by respondents' gender, house hold income level and age. Duncan tests of post-hoc (p<.05) confirm statistically significant differences between each respondents' groups. Demographically those who are in their middle ages (from 30's to 50's) and have higher household incomes are more likely to boycott a certain product.

Table 5. Mean comparisons of key measurements by demographic variables

		Association Involvement			Perceived Trust Level			Efficacy			Personal Attitude Toward Society			Participation In Ethical Consumerism		
		Mean	SD	t/F	Mean	SD	t/F	Mean	SD	t/F	Mean	SD	t/F	Mean	SD	t/F
Gender	Male	2.208	.785	14.413 ***	2.845	.685	.495	2.697	1.122	5.956 ***	3.779	.776	-18.743 ***	2.066	1.110	-.155
	Female	2.103	.763		2.841	.682		2.636	1.105		3.912	.739		2.067	1.159	
House Hold Income	level1	2.053 a	.746	203.652 ***	2.781 a	.684	132.944 ***	2.493 a	1.108	248.922 ***	3.852 a	.786	13.666 ***	1.914 a	1.100	279.464 ***
	level2	2.160 b	.762		2.831 b	.684		2.628 b	1.117		3.856 a	.767		2.031 b	1.117	
	level3	2.245 c	.782		2.882 c	.668		2.735 c	1.099		3.853 a	.743		2.181 c	1.148	
	level4	2.332 d	.814		2.990 d	.689		2.938 d	1.109		3.916 b	.705		2.388 d	1.180	
Age	20's	2.039 a	.722	89.567 ***	2.756 a	.667	53.967 ***	2.708 d	1.077	21.821 ***	3.771 a	.783	38.814 ***	2.035 b	1.109	110.278 ***
	30's	2.079 b	.762		2.796 b	.676		2.700 cd	1.120		3.825 b	.775		2.158 c	1.175	
	40's	2.181 c	.795		2.856 c	.688		2.694 cd	1.112		3.844 bc	.757		2.177 c	1.163	
	50's	2.224 d	.793		2.877 cd	.689		2.668 bc	1.131		3.864 c	.747		2.141 c	1.150	
	60's	2.248 d	.789		2.893 de	.688		2.644 b	1.131		3.893 d	.744		2.027 b	1.120	
	more than 70's	2.158 c	.766		2.908 e	.680		2.538 a	1.104		3.933 e	.735		1.789 a	1.033	

*p<.10, **p<.05, ***p<.01

The result for model 1 in [Table 6], the full individual-level and country-level model, show that the effects for all of the variables significantly increase the probability of being or acting an ethical consumer. As individual factors, gender is strong predictor of ethical consumerism, as well as having higher levels of household income and younger age make ethical consumerism. In addition, having higher levels of perceived trust, association involvement, efficacy, and personal attitude toward society positively affect ethical consumerism.

Meanwhile, as expected, economic development indicator (logged GDP per capita) as a country level variable strongly increase the possibility of one's participation in ethical consumerism. Also social capital, measured by association membership and perceived trust level, shows significantly positive effect on participating in boycott. The finding reveals that buycotting is more likely for people who live in regions with lower frequency of social meetings is unexpected.

Table 6. Generalized Linear model of all variables

			B	Std. Error	Hypothesis Test	test of model effects
					Wald Chi-Square	Wald Chi-Square
(Intercept)			-2.810	.1032	742.093 ***	850.926 ***
Individual level	gender	Male	-.043	.0156	7.556 ***	7.556 ***

	Female	0	.	.	
	Income level1	-.219	.0230	90.326 ***	107.737 ***
household income	Income level2	-.200	.0229	75.998 ***	
	Income level3	-.129	.0226	32.446 ***	
	Income level4	0	.	.	
	AGE	-.007	.0005	229.022 ***	229.022 ***
	association involvement	.399	.0108	1372.041 ***	1372.041 ***
	Perceived trust level	.136	.0127	113.520 ***	113.520 ***
	efficacy	.016	.0077	4.226 ***	4.226 ***
	personal attitude toward society	.122	.0105	134.562 ***	134.562 ***
Country level	postmaterialism level	.217	.0330	43.328 ***	43.328 ***
	logged GDP per capita	.619	.0194	1014.861 ***	1014.861 ***
	Democracy score	.039	.0054	51.871 ***	51.871 ***
	(Scale)	.906	.0104		

*p<.10, **p<.05, ***p<.01

Table 7. GLM for the interaction between the individual-level variables and countries'
postmaterialism/logged GDP capita/Democracy score

			Model1				Model2				Model3			
			Interaction withcountries' postmaterialism				Interaction with logged gdp per capita				Interaction with democracy score			
			B	Std. Error	Hypothesis Test Wald Chi -square	Test of Model Effects Wald Chi -square		B	Std. Error	Hypothesis Test Wald Chi -square	Test of Model Effects Wald Chi -square		B	Std. Error	Hypothesis Test Wald Chi -square	Test of Model Effects Wald Chi -square
(intercept)			.482	.0621	60.241 ***	29.512 ***	(intercept)	.685	.0606	127.644 ***	87.051 ***	(intercept)	.518	.0623	69.115 ***	38.493 ***
Main effect	Gender	Male	-.041	.0162	6.343 **	6.343 **	Male	-.036	.0156	5.413 **	5.413 **	Male	-.030	.0162	3.460*	3.460*
		Female	0	.	.		Female	0	.	.		Female	0	.	.	
	House Hold Income	Income Level1	-.237	.0238	98.483 ***	106.883 ***	Income Level1	-.214	.0231	86.253 ***	103.185 ***	Income Level1	-.226	.0238	90.083 ***	97.806 ***
		Income Level2	-.189	.0237	63.549 ***		Income Level2	-.193	.0229	71.330 ***		Income Level2	-.180	.0237	57.928 ***	
		Income Level3	-.148	.0234	39.941 ***		Income Level3	-.117	.0226	26.726 ***		Income Level3	-.145	.0234	38.281 ***	
		Income Level4	0	.	.		Income Level4	0	.	.		Income Level4	0	.	.	
	Age		-.004	.0005	77.494 ***	77.494 ***	Age	-.007	.0005	219.791 ***	219.791 ***	Age	-.006	.0005	135.923 ***	135.923 ***
	Association Involvement		.464	.1097	17.907 ***	17.907 ***	Association Involvement	.610	.0856	50.713 ***	50.713 ***	Association Involvement	.253	.0658	14.817 ***	14.817 ***
	Perceived Trust level		-.920	.1140	65.231 ***	65.231 ***	Perceived Trust level	.153	.1066	2.061	2.061	Perceived Trust level	-.375	.0580	41.698 ***	41.698 ***
	Efficacy		-.072	.0795	.825	47.300	Efficacy	-.111	.0720	2.360	2.360	Efficacy	.029	.0398	.532	.532
	Personal attitude Toward society		.507	.0737	47.300 ***	.825 ***	Personal attitude Toward society	-.694	.0688	102.026 ***	102.026 ***	Personal attitude Toward society	.278	.0385	52.412 ***	52.412 ***
Interaction effect	Association involvement		-.010	.0415	.061	.061	Association involvement	-.047	.0203	5.268	5.268	Association involvement	.016	.0072	5.044 **	5.044 **

*postmaterialism level					*logged gdp/capita					*democracy score				
Perceived trust level *postmaterialism level	.422	.0432	95.716 ***	95.716 ***	Perceived trust level *logged gdp/capita	-.004	.0252	.021	.021	Perceived trust level *democracy score	.064	.0065	98.924 ***	98.924 ***
Efficacy *postmaterialism level	.030	.0301	.994	.994	Efficacy *logged gdp/capita	.029	.0171	2.928*	2.928*	Efficacy *democracy score	.000	.0044	.001	.001
Personal attitude toward society *postmaterialism level	-.158	.0279	32.240 ***	32.240 ***	Personal attitude toward society *logged gdp/capita	.193	.0165	138.085 ***	138.085 ***	Personal attitude toward society *democracy score	-.020	.0043	21.766 ***	21.766 ***
(scale)	.972	.0112				.907	.0104				.969	.0111		

[Table 7] displays the key results of this study, the interaction between the individual-level variables and countries' postmaterialism, logged GDP per capita, Democracy score. Being female, having younger age and higher household income make ethical consumerism regardless of country level affluence.

Perceived trust level as a factor of one's social capital shows positive interaction with postmaterialism level. Inglehart and Sullivan & Transue argued that trust level or tolerance level toward others could be led by postmaterialism [7][8], and Inglehart, Putnam, Torsvik, Rimac & Stulhofer pointed a positive correlation between post-materialism and social capital [8][9][10][11].

The interaction effect between personal attitude toward society and postmaterialism is negative. However previous analysis showed that both variables of personal attitude toward society and level of postmaterialism have positive static effects on ethical consumerism. These conflicting results mean that the curve slope of the graph showing the relationship between the independent and dependent variables is changed due to the interaction effect. That is, although the regulatory effect is negative, the tendency does not change.

Efficacy and personal attitude toward society display positive significant interaction with GDP. However, in this generalized linear model, efficacy has no main effect, while statistically positive effect was examined in the simple model with no interactions [Table 6]. It is because of the statistical mask effect, which means that interaction effect covers significant main effect. Therefore, in this case, the result should be interpreted that although the efficacy does not have a significant main effect, it is indeed statistically significant.

The interaction effect between personal attitude toward society and logged GDP per capita as an indicator of economic development is positive. Combined with Summers finding for one's attitude, it seems that positive interaction between the attitude that having certain behavior as a good citizen is important with GDP

Both association involvement and perceived trust level as a factor of social capital show strong positive interaction with Country's democracy score. As many scholars have insisted that boycotting is a type of political and ethical behavior [12][13][14], market can be an arena for politics and market actors. Therefore high level of one's social capital in more democratic countries provides a space for the creation of discourse critical of the present issues related to consumption, and a way for active opposition to it [15].

The interaction effect between personal attitude toward society and democracy score is negative. This means that the curve slope of the graph showing the relationship between the independent and dependent variables is changed due to the interaction effect. That is, although the regulatory effect is negative, the tendency does not change. On the other hands, this also can be interpreted the effect of personal attitude toward society is actually stronger in less democratic countries.

3. Conclusion

By including numerous non-Western countries, this study provides the most expansive investigation of the determinants of ethical consumerism of any study to date. The findings confirm the importance of the established individual- and country-level predictors of ethical consumerism.

Firstly, the findings for income level support the generalization of the idea that ethical consumerism is an activity of the privileged. Regardless of country-level affluence, higher levels of household income are associated with a higher likelihood of ethical consumption at the individual level. This suggests that the standard resource model of political participation applies well to ethical consumerism [12]. This does not negate the potential for ethical consumerism to expand political consciousness of the marginalized, but it does suggest that, at least for boycotting and buycotting, participatory inequality is, indeed, a problem. In addition, the finding for gender suggests that the consistent pattern in previous work that women ethically consume at higher rates than men.

Secondly, As Neilson and Paxton's and Summers suggested, this study shows that higher individual-level social capital is associated with higher likelihood of ethical consumption [15].

Thirdly, both association involvement and perceived trust level, which represent social capital, are the individual-level variables whose effects are stronger in highly democratic countries on ethical consumerism, while personal attitude toward society is actually stronger in less democratic countries.

Efficacy and personal attitude toward society display positive significant interaction with logged GDP per capita. The interaction between these two individual level variables and GDP per capita is marginally significant and positive, suggesting that efficacy and personal attitude toward society are a more powerful predictor of ethical consumerism in high-affluence countries.

Perceived trust level as a factor of one's social capital shows positive interaction with postmaterialism level, while the interaction effect between personal attitude toward society and postmaterialism is negative.

As previous analysis shows that each variable has a static effect on its dependent variables, although the regulatory effect is negative, the tendency does not change. This means that the curve slope of the graph showing the relationship between the independent and dependent variables is changed due to the interaction effect.

In this paper, ISSP 2014 data is used for analysis, this study has a limitation of defining ethical consumerism and sophisticated understanding. As survey items are developed that allow for meaningful distinctions to be made between boycotting, buycotting, and even other types of ethical consumerism such as politically motivated brand rejection [16], ethical investing, or "discursive political consumerism" [13], more sophisticated measure should be considered for future research.

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