Research Article

An Investigation into the Green Marketing Effects on Green Consumerism

Ahmet Tuz [1] **& Begüm Sertyeşilışık**[2]

Abstract

Having become more attention grabbing lately, green marketing (GM) is a concept that affects consumers with respect to their purchasing decisions. The priority for consumers gradually concern environment-friendliness of products/services. Thus, market segmentations started to expand to include environmental concerns. A number of studies regarding GM can be found in the literature, as well as green purchase intention (GPI) and green purchasing behavior. The majority of the existing studies concern target market segmentation with respect to demographic variables within the same country and specifically concerning the evaluation of environmental purchasing behavior. However, there are limited studies in the literature, investigating green consumerism from an international point of view. This study analyses the relationship of international consumers' green self-identification levels. In this study, international participants are at the postgraduate level. It is aimed to evaluate how the green self-identification of consumers with the same education level is related to their green product awareness (GPA) and GPI and price sensitivities (PS). A total of 119 respondents filled the questionnaire. Data was analyzed later with SPSS 23. Findings showed that respondents, who define themselves to be environment-friendly, tended to be more aware of green products, in addition to the tendency that GPA has a significant impact on GPI and GPA and that GPA has a significant impact on GPI. Furthermore, the study concluded that the tendency that country significantly affects environment-friendliness. This study is hoped to be useful for researchers and practitioners in the field, who wish to focus on international green consumerism.

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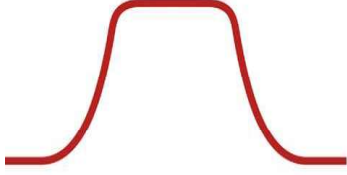
<u>*Araştırma Makalesi*</u>

Yeşil Pazarlamanın Yeşil Tüketim Üzerindeki Etkileri Üzerine Bir Araştırma

Ahmet Tuz[1] & Begüm Sertyeşilışık[2]

Öz

Yeşil pazarlama, son zamanlarda giderek daha fazla dikkat çeken ve tüketicileri satın alma kararları açısından etkileyen bir kavramdır. Tüketiciler gün geçtikçe ürün ve hizmetlerin çevre dostu olmasına öncelik vermeye başlamışlardır. Böylece, pazar bölümlendirmeleri çevresel kaygıları da içerecek şekilde genişlemeye başlamıştır. Literatürde yeşil satın alma niyeti (YSN) ve yeşil satın alma davranışının yanı sıra yeşil pazarlama ile ilgili bir dizi çalışma bulunmaktadır. Mevcut araştırma çalışmalarının çoğu, aynı ülke içindeki demografik değişkenler ve özellikle çevresel satın alma davranışının değerlendirilmesi ile ilgili olarak hedef pazar bölümlendirmesiyle ilgilidir. Öte yandan, literatürde yeşil tüketici kavramını uluslararası bir bakış açısıyla inceleyen sınırlı sayıda çalışma bulunmaktadır. Bu amaçla, bu çalışma uluslararası tüketicilerin yeşil öz kimlik düzeylerinin (ÇD) ilişkisini analiz etmektedir. Bu çalışmada, uluslararası katılımcılar lisansüstü düzeydedir. Aynı eğitim düzeyine sahip tüketicilerin kendilerini yeşil olarak tanımlamalarının, yeşil ürün farkındalığı (YÜF), yeşil ürün satın alma niyetleri(YSN) ve fiyat duyarlılıkları (FD) ile nasıl ilişkili olduğunun değerlendirilmesi amaçlanmaktadır. Anket yönetimiyle 119 kişiden veri toplanmıştır. Toplanan veriler SPSS 23 yardımıyla Korelasyon Analizi, Lojistik Regresyon Analizi Ki Kare Testi, Normallik Testi, Bağımsız t-testi, ANOVA ve frekans, ortalama ve çapraz tablolama ile analiz edilmiştir. Bulgular, kendilerini çevre dostu olarak tanımlayan katılımcıların, YÜF'ü ve YSN'nin birbiri üzerinde önemli bir etkisi olduğu eğilimine ek olarak, yeşil ürünlerden daha fazla haberdar olma eğiliminde olduklarını göstermiştir. Ayrıca, çalışma, ülkenin çevre dostu olma eğilimini önemli ölçüde etkilediği sonucuna varmıştır. Bu çalışmanın, uluslararası yeşil tüketiciliğe odaklanmak isteyen bu alandaki araştırmacılar ve uygulayıcılar için faydalı olması umulmaktadır.

Anahtar Kelimeler: Yeşil Tüketicilik, Yeşil Satın Alma Niyeti, Yeşil Pazarlama, Yeşil Ürün Farkındalığı, Fiyat Duyarlılığı.

JEL Kodlar: L21, M31, M37, Q01

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1. Introduction[1]

Environmental degradation and pollution fostered green marketing (Tuz & Sertyeşilişik, 2021a). American Marketing Association (AMA) introduced green marketing to the marketing era (Simão & Lisboa,2017; Zhu & Sarkis, 2016; Yadav & Pathak, 2013), where green marketing has become the encouraging point of marketing and management fields by emphasizing human beings and environment relationship as a new concern (Leonidou & Leonidou, 2011). Green marketing received attention in the late 1980s and 1990s (Simão & Lisboa,2017; Dangelico & Vocalelli, 2017; Yadav & Pathak, 2013) as a significant subject of studies and research in the marketing field. Polonsky (1994) defined the green marketing as a subset of marketing activities, which evaluate and examine the environmental issues (Zhu & Sarkis, 2016). Green marketing strategies seek to minimize environmental footprint through whole life cycle of production processes and/or services (Tuz & Sertyeşilişik, 2020; Tseng & Hung, 2013) and to focus on green product/service demand creation effectively (Hasan & Ali, 2015; Solaiman, Osman, & Halim, 2015; Shamsuddoha, 2005).

Green product/service, which can be defined as environment-friendly/consciousness products/services having sustainable supply chain management and green manufacturing process (Maniatis, 2016) and being designed to minimize the natural resource depletion and environmental degradation in production, consumption, and post-consumption phases (Dangelico & Vocalelli, 2017; Solaiman et al, 2015; Tseng & Hung, 2013). When consumers take decision on whether or not to purchase a green product/service, green marketing provides consumers information about green product/service (Maniatis, 2016; Haws, Winterich, & Naylor, 2014; Peattie & Charter, 2003). Green consumers that reflect their environmental concern to their purchasing decision has become the main concern of green marketing activities (Suki, Suki & Azman,2016; Kumar & Ghodeswar, 2015). Green marketing awareness and reflection of environmental knowledge to purchase intention, green consumers are centralized in green marketing strategies through their environmental concern, which refers to green self-identification (Zhu & Sarkis, 2016). Interrelation of green self-identification, environmental knowledge and green marketing awareness affect green consumers' environmentally purchasing behavior (Haws et al, 2014). Consequently, green marketing is a strategic marketing tool supporting companies to understand the consumers' needs and expectations and to respond them by supplying product/service with higher environmental performance. Moreover, green marketing gives way to new marketing opportunities, differentiation, and new consumer segmentation to companies (Peattie & Charter, 2003).

Targeting green consumers, identification of consumers through their characteristics and their green purchase intention (GPI) are the green marketing main segmentation approaches (Dangelico & Vocalelli, 2017). There have been many attempts to segment the market keeping in mind targeting green consumers. There are many studies focusing on variables (e.g., segmentation criteria including environmental and behavioral variables, while demographic variables; psychographic variables including personality and motivation criteria) to segment the target market (e.g., Poongodi & Gowri, 2017; Maniatis,2016; Haws et al, 2014; Tseng & Hung, 2013). Moreover, apart from the mentioned variables, some studies segment the target market through green consumers' willingness, intention, perception, involvement, and conservation characteristics (e.g., Burke, Eckert, & Davis, 2014; Modi & Patel, 2013; Chitra, 2007; D'Souza, Taghian, & Lamb, 2006; Ginsberg & Bloom, 2004).

Most recent researches (e.g., Poongodi & Gowri, 2017; Haws et al, 2014), which differ

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[1] Ethics committee obligation has been introduced in every survey study conducted since 2020. However, since this study was conducted before 2020, ethics committee approval was not obtained.

in focused variables, focus on segmenting green consumers in the same country to evaluate environmental behavior and purchasing decision. There is a lack of studies focusing on understanding international aspect of green consumerism, the country-based comparison and analysis of green marketing effects on green consumerism. In addition, there is a gap in the green marketing literature on evaluation of the perception and green purchasing intentions of consumers having the same education level (e.g. postgraduate level) and living in different countries. This study aims to examine the relation of green self-identification (Environment-friendliness (EF)) of the international consumers at the same educational level with their green product awareness (GPA), and their GPI and price sensitiveness (PS). The paper's structure is as follows: First, the green consumerism is examined after the introduction part. Second, the research method is described. Finally, the results of analyses are analyzed, limitation and future research opportunities are discussed

2. Green Consumerism

Green consumerism broadly includes awareness of depletion of natural resources (Yadav & Pathak, 2013) and the social impact of green consumer behaviors underlying eco-friendly consumption (Zhu & Sarkis, 2016). Green consumerism can be thought of as a green self- identification of consumers as environmentally friendly (Zhu & Sarkis, 2016). The green consumer, who is the main driver for the green marketing process (Shamsuddoha, 2005), is defined to avoid purchasing any product that may endanger all kinds of living things (Tekade & Sastikar, 2015). Since the number of environmentally sensitive consumers increase significantly, the desire to buy green products conceptually fosters the intention to purchase green products (Hasan & Ali, 2015). The green features of the relevant product and environmental awareness are the main factors affecting the green product choice of consumers (Suki et al, 2016). Consumers having a positive attitude towards environmental concern become more willing to add environmental information to their purchasing decisions, which enable green market expansion, green product production and green marketing (Tuz & Sertyeşilışık, 2021b).

Green consumers are the focus of environmental marketing strategies that focus on reducing their impact on the environment by changing their purchasing behavior and putting pressure on companies (Kumar & Ghodeswar, 2015). Centralizing green consumers in green marketing activities enables companies to understand external pressures and respond to external pressures by increasing their environmental performance (Solaiman et al, 2015). Thus, through green marketing, companies can achieve a unique competitive advantage by improving their corporate image, reputation, and product image (Suki et al, 2016).

Green consumers tend to buy green products, whether for ecological performance, a socially responsible consumption perspective, or personal benefits (Maniatis, 2016; Peattie & Charter, 2003). Consumer's green purchasing decision and behavior can be affected by information on net product ingredients, eco-labeling, product appearance, and whether or not the product is environment-friendly (Suki et al, 2016; Maniatis, 2016; Tseng & Hung, 2013). Haws et al (2014) determined five factors affecting the decision to purchase green products by contributing to environmental awareness as product's environmental impact, personal impact on the environment, purchasing behavior related to environmental protection, waste concern, and environmental protection commitment (Suki et al, 2016). Akenji and Bengtsson (2010) created the "triple I framework" derived from interest, impact, and tool, where Interest represents consumers' environmental knowledge and commitment to environmental protection, while impact represents consumers' GPA. Tools can be classified as green marketing efforts, tangible, assurance, and reliability dimensions of green products/services (Akenji & Bengtsson,2010). Market targeting and segmentation allows companies to identify consumers

(Dangelico & Vocalelli, 2017). Green marketing has two main approaches to segment consumers: through consumers' characteristics and consumers' GPI (Dangelico & Vocalelli, 2017). According to many studies (e.g., Modi & Patel, 2013; Ginsberg & Bloom, 2004; Peattie,1999; Ottman & Reily, 1998) in the literature, segmentation in green marketing differentiates from the traditional marketing segmentation. Ottman and Reily (1998) segmented the green consumers according to the willingness of contribution to environmental protection. Peattie (1999) created a green purchase perception matrix, which is the combination of the degree of compromise involved in making a greener purchase and the degree of confidence. As reported in Ginsberg and Bloom (2004)'s global marketing research and consulting company Roper ASW segmented the green consumers depending on the degrees of consumers' environmental concern (Ginsberg & Bloom, 2004), and the rationality and emotionality of green consumers' intention (Dangelico & Vocalelli, 2017). D'Souza et al (2006) created a two-dimensional model, which depends on the cognitive perspective of environmental products and consumers' perceived benefits/risks. Chitra (2007) segmented the green consumers through the perception towards eco-friendly aspects. Modi and Patel (2013) examined environmental variables and focused on pro- environmental behavior for segmenting green consumers, where the latter is influenced by energy economics, which represents economic factor, energy conservation, relating to recourse saving, and environmental activism. Burke et al (2014) focused on ethical consumerism and analyzed the consumers' purchasing behavior in terms of selection and rejection of ethical products. Peattie (1992) generalized the green consumer characteristics based on previous studies and defined the green consumers' characteristics as possession of inconsistency, confusion, sophistication in wants and needs, are adult and generally female with environmental consciousness. Furthermore, Shamsuddoha (2005) summarized the green consumer indicators, pointing out the particulars of consumers' greenness.

Many studies in the literature focused on demographic variables in segmentation studies of environment-friendly consumers according to age, income, education level and gender. There are studies suggesting a correlation between the age variable and environment-friendly purchasing behavior (Poongodi & Gowri, 2017; Haws et al, 2014). Some researchers believed in the young generation and found that they performed more green consumer behaviors than the older consumers (Tseng & Hung, 2013). The education variable has positively correlated with environment-friendly consumers and their purchase intention (Poongodi & Gowri, 2017; Haws et al, 2014; Tseng & Hung, 2013). Moreover, the reviewed literature stressed the education variable as more convenient than the other demographic variables (Modi & Patel, 2013).

3. Research Method

3.1. Research Design

The conceptual model is set as it is illustrated in Figure 1, and the research hypotheses are offered. A well-structured and self-administrated questionnaire is developed and structure referring to the construction of the conceptual model to test the research hypotheses. The questionnaire is developed on scale development procedure and created based on the literature review and structured on 17 questions.

The scales are abbreviated; descriptive analysis questions (Yes/No questions), multiple choice question forms, and 5-point Likert scale forms are used as a multi-item semantic differential scale in the questionnaire to collect and measure the data. The structured questionnaire is divided into two parts, where the first part aims to measure and provide analysis of EF, GPA, GPA, and GPI of the respondents. The second part is focused on expectation of

respondents and tried to find out the objectives, which can be listed as; finding out the reasons of not preferring to purchase green product; analyzing what green marketing can enable; determining how green marketing can be more effective in influencing consumer green product buying behavior.

3.2. Data Analysis

The collected data from the questionnaire is analyzed with SPSS 23.0 through different analyses such as Cronbach's Alpha Coefficient, KMO and Bartlett's Test through Factor Analysis, Correlation Analysis, Logistic Regression Analysis, Chi Square Test, Fischer's Exact Test, Independent t-test, ANOVA, and frequency, mean and cross tabulation.

Figure 1. The Conceptual Model
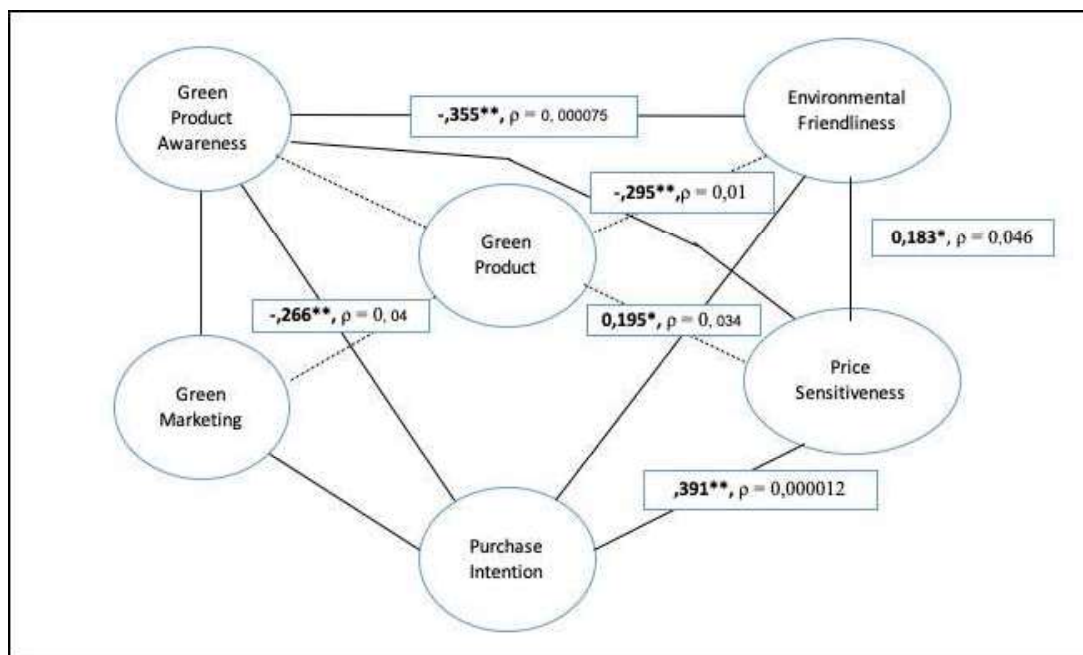
Source: authors.

3.3.   Sample and Data Collection

The sample population of the study comes from an international respondents' group with a postgraduate education level. Primary data is extracted from a face-to-face questionnaire of 130 national and international volunteered respondents in 2018. Ethics committee obligation has been introduced in every survey study conducted since 2020. However, since this study was conducted before 2020, ethics committee approval was not obtained.Elimination of unappropriated data (missing/incomplete) from the database, 119 completely responded questionnaires remained as a target sample with 91.54 % of response rate. 44,54% of the respondents were from the EU countries and 58% of the respondents are female. Majority of the respondents are in the age group of 20-25 years (65,55%).

4. Results and Discussion

4.1.Reliability and Validity of Measurement Model

GPI, green marketing, and green marketing effects on purchasing behavior scales are tested for their reliability with Cronbach Alpha Method, where 0,6 is recommended to be taken

as Cronbach Alpha's threshold for survey analysis in social research studies (Maniatis, 2016), moreover it should preferably exceed 0.70 (Popp & Woratschek, 2017). The Cronbach Alpha coefficients of each construct are reliable ranging from .74 to .82 and exceeding the accepted reliability threshold of .07.

KMO and Bartlett's Test through factor analysis are assessed to the scales for measuring the reliability of the questionnaire. The KMO and Bartlett's Sphericity factor analysis is used to find out the reliability of the grouping of factors, which should be resulted above .05 (Santos, Basso, & Kimura, 2018). The results of KMO and Barttlett's test are ranging from .69 to.85 and exceeding the accepted reliability threshold of .05. As it is shown in Table 1, all values are vlid and met the appointed minimum criteria of reliability and validity.

Table 1. Validity Results of Analysis

Construct	Cronbach's Alpha	KMO and Bartlett's Test	Number of Items
GPI	0,746	0,692	7
Green Marketing	0,824	0,851	7
Green Marketing Effects on Consumer Purchasing Behavior	0,792	0,789	15

4.2. Hypotheses Testing

The Correlation Analysis, ANOVA, Regression Analysis, Independent T-Test and Normality Test are conducted to test the structural model hypotheses. The existence of relationship between demographics and other variables such as; EF, GPA, GPI and PS proposed in H0.

It is aimed to reveal the normality test results of the variables in the first step of the hypotheses testing. The acceptable skewness and kurtosis values should be ranged between -2 and +2 to prove the normal distribution of the testing results (George & Marley, 2010). The skewness and kurtosis values indicated that the outputs for the testing variables are normally distributed.

As it is illustrated in Table 2, according to chi-square test, t-test results and normality test results, there is a relationship between demographics and EF and GPI, however, there is no relationship with GPA and PS. Moreover, there is a relationship between gender and PS.

Table 2. Chi Square, T test and Normality Test Results

	EF			GPA			GPI			PS		
	Chi-Square Test	T Test		Mann-Whitney Test	T Test		Mann-Whitney Test	T Test		Mann-Whitney Test	T Test	
	Chi Square	t	Sig.	Sig.	t	Sig.	Sig.	t	Sig.	Sig.	t	Sig.
Gender	/Sig.	2,938	0,004	0,699	0,106	0,916	0,001	3,477	0,001	0,097	2,702	0,008
Country	0,023	2,127	0,036	0,498	0,422	0,674	0,008	2,709	0,008	0,274	0,992	0,323
Skewness	Skewness	0,355		Skewness	-0,184		Skewness	0,277		Skewness	-0,134	
Kurtosis	Kurtosis	-0,007		Kurtosis	0,523		Kurtosis	-0,1957		Kurtosis	-0,104	

Table 3.Hypotheses List

Hypothesis Number	Proposed Hypothesis
H1	There is significant impact of EF on GPA
H2	There is significant impact of EF on GPI
H3	There is significant impact of EF on PS
H4	There is significant impact of GPA on GPI
H5	There is significant impact of GPA on PS
H6	There is significant impact of GPI on PS

There are 6 hypotheses analyzed to reveal the interaction of EF, GPA, GPI and PS with demographics. It is obtained from correlation analysis that gender and country demographics are correlated with EF and GPI. The proposed hypotheses are listed in Table 3. The hypotheses listed in Table 3 are analyzed through correlation and regression analysis. According to test results, the hypotheses are supported and accepted. The analysis results are indicated in the Table 4.

Table 4. Correlation and Regression Analysis Results

	Gender	Country	GPA	EF	GPI	PS
Gender			0,48	-,252**	-,319**	-0,167
Country			0,38	-,193*	-,244**	-0,091
GPA				-0,355	-0,266	-0,295
EF					0,195*	0,183*
GPI						,391**
PS						

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

	R	R Sq.	Beta Unstd.	Beta Std.	T	Sig.	Pearson Correlation Corr.	Sig	ANOVA F	Sig	Durbin Watson
EF - GPA	0,355	0,126	-0,354	-0,355	-4,104	0,000	-0,355	0,000	16,842	0,000	1,667
EF - GPI	0,195	0,38	0,134	0,195	2,146	0,034	0,195	0,017	4,606	0,034	1,924
EF - PS	0,183	0,34	0,148	0,183	2,015	0,046	0,183	0,023	4,06	0,046	1,651
GPA - GPI	0,266	0,71	-0,182	-0,266	-2,968	0,004	-0,266	0,002	8,807	0,004	2,063
GPA - PS	0,295	0,87	-0,238	-0,295	-3,341	0,001	-0,295	0,001	11,164	0,001	1,701
GPI - PS	0,391	0,153	0,458	0,391	4,573	0,000	0,391	0,000	20,911	0,000	1,635

It is essential to find out how the respondents see themselves from EF perspective. All male respondents define themselves as environment-friendly (EU; χ^2 =22,421, p=0,000053<0,01; non-EU; χ^2 =19,710, p=0,000195<0,01). Female respondents define themselves as environment-friendly, where non-EU respondents (χ^2=11,029, p=0,004<0,05) has a significant value at the 0,05 level while the value for EU respondents (χ^2 =5,200, p=0,074<0,1) is significant at the 0,1 level. It is being asked level of GPA. Supporting H0 and H1, all Non-EU respondents (Male Pearson Corr.-0,401, p=0,025<0,05; Female Pearson Corr. -0,589, p= 0,000<0,01) who define themselves as EF are aware of green product.

GPA significantly affects the GPI. Supporting H0, H2 and H4, the majority of the respondents have purchased green product; all male respondents, who are aware of green product, are more prone to purchase green products (EU: Pearson Corr. -0,360, p=0,026<0,05; Non-EU: Pearson Corr. -0,501, p=0,04<0,05).

There is significant impact of GPI, GPA on PS. Supporting H0, H3, H5 and H6, the majority of respondents think that green products have higher price than non-green products. All respondents are willing to purchase green product in the case of having same price with non- green products, whereas any price increase in green product changes the green product purchase willing to a seldom GPI; non-EU male respondents, who are aware of green product (Pearson Corr. -0,3950, p=0,028<0,05) will change their GPI from at all times to often and seldom purchasing behavior (Pearson Corr. 0,490, p=0,005<0,01), moreover, EU male respondents will have a seldomly purchase intention against any price increase (Pearson Corr. 0,424, p=0,005<0,01).

Binary logistic regression analysis is implemented to determine the variables effecting GPI. As it is shown in the Table 5, it is aimed to find out the dependence of the regression models whether GPI is based on the GPA, EF, PS, and demographics. Country (Wald= 5,478, ρ=0,019 < 0,05) is one of the influencer parameters of respondent's GPI; non-EU respondents give more priority to buy green product than EU respondents. Gender (Wald= 3,764, ρ=0,052 < 0,10) influences GPI, where female prioritizes to purchase green product than male consumers. PS is one of the most influence parameter effecting respondent's GPI (Wald= 13,124, ρ=0,00029 < 0,01); Female Non-EU citizens do not prioritize the green product purchase due to the price increases. Female non-EU respondents prefer not to use and/or seldomly use green products due to lack of confidence in performance (Wald= 3,392, ρ=0,065 < 0,1) and lack of awareness (Wald= 2,757, ρ=0,097 < 0,1). Moreover, from the green marketing strategies perspective, non- EU citizens believe that the information on the product (Wald= 6,467, ρ=0,011 < 0,05) and green theme advertisements (Wald= 3,483, ρ=0,062 < 0,1) should be trustworthy.

Table 5. Binary Logistics Regression Analysis Results

	B	S.E.	Wald	Sig.	Relationship Intensity
Gender	1,436	0,74	3,764*	0,052	Cox & Snell R² = 0,454
Country	1,974	0,843	5,478**	0,019	Nagelkerke R² = 0,609
PS	3,362	0,928	13,124***	0,00029	
GPA	-0,405	0,501	0,653	0,419	
EF	-0,164	0,469	0,123	0,726	
Constant	-12,381	5,227	5,611**	0,018	

* ρ < 0,1	Omnibus Tests of model coefficient 0,000028
** ρ < 0,05	Prediction percentage 86,50%
*** ρ < 0,01	

Green product characteristics is raised as a question to understand what the respondents understand from green product. The results underline that 88,2% of the respondents described green product as environment-friendly, 54,6% of respondents describe green product as energy saving, whereas 47,1 % of respondents think green product as reusable. Majority of the respondents do not consider the green product's economic performance whereas only 15,2% respondents describe green product as cost effective.

Organic food is the top product to be preferred to purchase as green product; EU male respondents (83,8%) and non-EU country male respondents (80,00 %), while all female respondents living in the EU and 80,6% living in the non-EU countries prefer to buy organic food at the most as green product. Durability is the convincing elements for purchasing green product for the respondents generally. Male respondents give priority to durability (EU respondents: 68,42%, non-EU respondents: 58,06%), whereas female respondents prioritize design element (EU respondents: 66,67%, non-EU respondents: 68,57%). Packaging is the least convincing element for purchasing green products for all respondents (generally 35,21%).

Social media tends to create the most awareness of green products for both genders respondents (86,8% of male,92,0% of female), however, not properly promotion, not easily available in the shopping malls and not informative label of green products are the reasons of seldom use of green products for the respondents who do not purchase or sometimes repeat purchase the green products globally.

Increasing consumers' awareness of green product is one of the green marketing factors, which has a meaningful relationship with the gender, while companies' attempt to address society's new concern and to enhance quality of life are the significant enabling factors of green products marketing for all international respondents from different countries, who do not purchase or sometimes repeat purchasing green products.

Product and price are the marketing mix elements, which strongly influence EU female and male respondents and non-EU male respondents; whereas non-EU female respondents are influenced by product and promotion marketing elements strongly, price has the least power on Non-EU citizen female respondents. The half of the respondents (48,3 %) are neutral about the green marketing effectiveness than regular marketing. Product packaging, which is a good information resource to see the green contents of the product is one of the significant green marketing strategies for all respondents. Furthermore, from the international perspective,

advertisement, which contains and delivers health and safety message about green products generates awareness of green products' benefits for health and environment, is one of the meaningful green marketing strategies influencing the respondents' green product buying behavior. All respondents find out green themes being used in advertisement of products trustworthy and believed educating people through some public forums about green products will be effective for creating green product consuming behavior.

Product packages which include the green contents, advertisement of health and safety advantages, existence of green/sustainability certifications, environment-friendliness of the product are the effecting marketing strategies influencing the respondents' consuming green product behavior, who do not purchase or sometimes repeat purchasing green products.

5. Conclusion

This study examined the relation of green self-identification of the international consumers (EF) at the same educational level with their GPA and their green product purchasing behaviors (GPI and PS). It has been found that there is a statistically approved correlation between demographics (gender and country) and EF and GPI.

GPI is influenced by country (Wald= 5,478, ρ=0,019 < 0,05) where non-EU respondents give more priority to buy green product than EU respondents. Moreover, Gender (Wald= 3,764, ρ=0,052 < 0,10) influences GPI, where female prioritizes to purchase green product than male consumers.

The results indicated that gender, country, and PS have a meaningful impact on the respondent's green product purchase behavior. Moreover, self-identification as environmentally friendly had a significant impact on GPA and GPI. Female non-EU respondents do not prioritize the green product purchase due to the price increases. Female non-EU respondents prefer not to use and/or seldomly use green products due to lack of confidence in performance (Wald= 3,7392, ρ=0,065< 0,1) and lack of awareness (Wald= 2,757, ρ=0,097 < 0,1).

The results showed that green marketing has a significant impact on green consumerism. country and gender demographics have significant impact on determination of green marketing mix tools.

Non-EU respondents believe the information on the product (Wald= 6,467, ρ=0,011 < 0,05) and green theme advertisements (Wald= 3,483, ρ=0,062 < 0,1) should be trustworthy.

Social media tend to create the most awareness of green products for both genders respondents, however, not properly promotion, not easily available in the shopping malls and not informative label of green products are the reasons for seldom use of green products for the respondents who do not purchase or sometimes repeat purchasing the green products globally.

Product and price are the marketing mix elements, which strongly influence EU female and male gender and non-EU male respondents; whereas female non-EU respondents are influenced by product and promotion marketing elements strongly whereas price has the least power on non-EU female respondents.

Product packaging, which is a good information resource to see the green contents of the product is one of the significant green marketing strategies for all respondents. Furthermore, from the country perspective, advertisement, which contains and delivers health and safety message about green products generates awareness of green products' benefits for health and environment, is one of the meaningful green marketing strategies influencing the consuming

green product buying behavior.

All respondents find out green themes being used in advertisement of products trustworthy and believed educating people through some public forums about green products will be effective for creating green product consuming behavior.

Product packages which include the green contents, advertisement of health and safety advantages, existence of green/sustainability certifications, environment-friendliness of the product are the effecting marketing strategies influencing the respondents' consuming green product behavior, who do not purchase or sometimes repeat purchasing the green products.

This research contributes to the body of green marketing, green consumer segmentation and green consumerism. In this research, the lack of green consumerism analyses based on the same level educated people, who are living in different countries is stressed. The limitation of this research is that findings of this current research cannot be generalized due to the small sample size. Further researches are recommended to be carried out on international green consumerism in different industries in different countries with a large sample size. This research can be useful for professionals in the relevant field.

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