Yayın Geliş Tarihi: 14.02.2020 Yayına Kabul Tarihi: 29.01.2021 Online Yayın Tarihi: 31.03.2021 http://dx.doi.org/10.16953/deusosbil.689530 Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi Cilt: 23, Sayı: 1, Yıl: 2021, Sayfa: 249-270 ISSN: 1302-3284 E-ISSN: 1308-0911

Araştırma Makalesi

# AN EXPLORATORY STUDY ON TURKISH CONSUMERS' ATTITUDE AND PURCHASE INTENTION TOWARDS GREEN PRODUCTS

Fulya MİDİLLİ<sup>\*</sup> Aslı TOLUNAY<sup>\*\*</sup>

### Abstract

Green marketing has become a fast-developing research field in recent years, even though the term "green product" is still new for consumers in developing and sociallyconstructed economies like Turkey. The aim of this study is to examine the effect of collective self-esteem and social influence on the green product purchase intention of Turkish consumers while delineating other factors that may play a role within this relationship. According to the results of the study which were gathered from 370 consumers, the effects of collective self-esteem, social influence and attitudes towards green products significantly influence green product purchase intention. It can be seen from the results that collective self-esteem and social influence positively affect consumers' green product purchase intention and the relationship between collective self-esteem and social influence on green product purchase intention is partially mediated by attitude toward green products. In addition, generational cohort differences play a significant role. While the impact of social influence on green product purchase intention is stronger for Gen X'ers, there was no generational difference on influence of collective self-esteem on purchase intention. Findings and implications are discussed.

**Keywords:** Green Product Purchase Intention, Green Marketing, Collective Self Esteem, Social Influence, Attitudes Towards Green Products

Bu makale için önerilen kaynak gösterimi (APA 6. Sürüm):

Midilli, F., Tolunay, A. (2021). An exploratory study on Turkish consumers' attitude and purchase intention towards green products. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 23* (1), 249-270.

<sup>\*</sup>Doktora Öğrencisi, Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Bölümü ORCID: 0000-0001-7179-8628, fulya85@gmail.com.

<sup>\*\*</sup>Dr. Öğr. Üyesi, Yeditepe Üniversitesi, İdari ve İktisadi Bilimler ORCID: 0000-0003-3856-8518, asli.tolunay@yeditepe.edu.tr.

# TÜRK TÜKETİCİLERİN YEŞİL ÜRÜNLERE KARŞI TUTUM VE SATIN ALMA NİYETİ ÜZERİNE KEŞFEDİCİ BİR ARAŞTIRMA

#### Öz

Yeşil pazarlama son yıllarda hızla gelişen bir araştırma alanı haline gelmesine ragmen yeşil ürün terimi Türkiye gibi sosyal yapılara dayanan gelişmekte olan ekonomilerde tüketiciler için hala yenidir. Bu çalışmanın amacı, kolektif benlik saygısı ve sosyal etkinin, Türk tüketicilerinin yeşil ürün satın alma niyetine etkisini ve bu ilişkide rol oynayabilecek diğer faktörleri tanımlamaktır. 370 tüketiciden elde edilen çalışmanın sonuçlarına göre, kolektif benlik saygısı, sosyal etki ve yeşil ürünlere yönelik tutumların yeşil ürün satın alma niyetiyle anlamlı bir şekilde etkili olduğu görülmüştür. Kolektif benlik saygısı ve sosyal etkinin, tüketicilerin yeşil ürün satın alma niyetini olumlu yönde etkilediği ve kolektif benlik saygısı ile yeşil ürün satın alma niyetindeki sosyal etki arasındaki ilişkiye kısmen yeşil ürünlere yönelik tutumun aracılık ettiği görülmektedir. Ek olarak, kuşak kohort farkının önemli bir rol oynadığı görülmüştür. Gen X tüketicileri için, Gen Y ile karşılaştırıldığında, sosyal etki yeşil ürün satın alma niyetinde daha güçlü bir etki sergilerken, kolektif.benlik saygısının yeşil ürün satın alma niyetindeki etkisi üzerinde kuşak farkları açısından bir fark tespit edilmemiştir. Bulgular ve çıkarımlar tartışılmıştır.

Anahtar Kelimeler: Yeşil Ürün Satın Alma Niyeti, Yeşil Pazarlama, Kolektif Benlik Saygısı, Sosyal Etki, Yeşil Ürünlere Karşı Tutumlar

#### **INTRODUCTION**

The number of environmentally conscious consumers is rising for almost three decades and as a result, it generates a whole new market for many companies. Recently with the increase in concerns about global warming and in the consumption of environmentally friendly products, the uneasiness on environmental and ecological problems has become more obvious (D'Souza et al., 2006). Peattie and Charter (1997) state that green marketing is a holistic approach which meets the needs of the society in terms of sustainability whilst helping companies in positioning and differentiating their brands and products. In addition, the commitment towards the environment can assist companies in targeting consumers, who identify themselves as environmentally conscious (Chan, 2001).

Within the literature that studies green marketing, it has been shown that behavioral and attitudinal factors affect environmentally friendly behavior and green consumption (Bang 2000; D'Souza et al., 2006; Fraj & Martínez, 2006; D'Souza et al., 2007; Mostafa, 2007). Some researchers have studied the impression of social norms, group conformity and personal values on green purchase behavior (Kalafatis, 1999; Kim & Chung, 2011; Park & Sohn, 2012). These factors not only influence consumers' attitudes towards green products, but also enable them to improve their self-image. Turkey has a young population, susceptible to social influence. Nonetheless, green marketing in Turkey can be considered as a relatively new concept. Consumer awareness of green marketing is increasing in cities; however, most of the Turkish population cannot be termed as environmentally conscious and green initiatives have yet to spread to large communities (Shrikanth & Raju, 2012). Hence, although many companies are promoting awareness about environmentally friendly products in Turkey (Uydacı, 2002), majority of consumers' understanding of terms like "organic", "eco- friendly", and "recyclable" is considered poor. As such, research related to consumer perceptions and attitudes about green products and environmentally friendly behavior is also limited.

The purpose of this paper is to bridge the gap in contemporary literature related to Turkish consumers' attitudes and intention towards green product purchase. With this aim, our research explores the influence of two factors, collective self-esteem and social influence, on Turkish consumers' green purchase intention. The role of attitude towards green products and the accrued differences with respect to generational cohorts, namely Gen X and Gen Y, are also delineated in this research. The first factor, collective self-esteem, describes the importance consumers place on their group memberships. Group associations give social identity and recognition. The value an individual places on group membership influences his/her product choice and purchase decision (Kim & Omizo, 2005). In cultures such as Turkey, where social conformance is important, consumers buy products that help them meet their social norms and values. The second factor is social influence on green behavior (Lee, 2008; Cheah & Phau, 2011). Research suggests that social norms and values are important in foreseeing consumers' acquiescence of green brands (Lee, 2009; Cheah & Phau, 2011; Park & Sohn, 2012). Moreover, prior academic research points out that factors like collective self-esteem and social influence have an influence over purchase intention on green product (Bang, 2000; D'Souza et al., 2006; Fraj & Martínez, 2006; D'Souza et al., 2007; Mostafa, 2007). Some researchers have also studied the impression of social norms, group conformity and personal values on green purchase behavior (Kalafatis, 1999; Kim & Chung, 2011; Park & Sohn, 2012). However, while prior research examines social influence (Lee, 2008; Cheah & Phau, 2011) and collective self-esteem (Kalafatis, 1999; Kim & Chung, 2011; Park & Sohn, 2012), most of them disregard attitude towards purchase intention which can be analyzed in harmony within the concept between collective self-esteem and social influence and green product purchase intention. Therefore, this paper examines the effect of these factors on consumers' green product purchase intention.

As a result, there are two main contributions of this paper. Initially, we present the role played by the attitude towards green products mediating the relationship between two social factors and purchase intention. As a second contribution, we shed light to the green purchasing behavior of Turkish consumers with respect to generational differences. A review of relevant literature with a set of hypotheses and the conceptual model are submitted in the following section. Next, we present sampling in the methodology section, followed by the findings and discussion.

## LITERATURE REVIEW

The concept of green marketing, which was known as marketing of the products that are assumed to be environmentally safe, was first debated broadly in a seminar held by American Marketing Association (AMA) in 1975. According to Peattie (2001), developing products and services with minimum impact to the environment that meet the needs of consumers is called green marketing. And products that are manufactured by a technology in green standards, which means causing no bad effect to environment, are called green products. Thereafter, consumers who are taking environmental actions as a result of their responsible behavior towards the environment are known as green consumers (Thøgersen & Crompton, 2009).

Accordingly, green purchasing intention stands for selecting products or services that are produced in an environmentally friendly manner with environmentally friendly materials to give less harm to the environment (Kilbourne & Pickett, 2008). Various studies suggest that consumers are likely to change their attitude when they are sensitive to the environment and purchase a green product that does not affect the environment (Schlegelmilch et al., 1996; Roberts & Bacon, 1997; Mostafa, 2007; Kilbourne & Pickett, 2008). Similarly, Laroche et al. (2001) exhibit that consumers choose green products to protect the environment and to minimize their effect that may harm the environment. Coddington (1993) even suggests that those green consumers preferred to pay more for green products that do not affect the environment, which is also supported by the outcomes of a survey conducted by an advertising agency, which proves that 82% of the participants are ready to pay 5% higher for green products in order to save the environment (Levin, 1990).

Previous research concentrating on green purchase intentions demonstrate that effective messages that focus on saving the earth influence people (Vladas et al., 2010). According to Polonsky (1994), as the awareness of global warming increases, both companies and consumers start to switch their product options to green. Extent literature further suggest that environmentally friendly behavior is affected by behavioral and attitudinal factors (Bang et al., 2000; D'Souza et al., 2006; Rios et al., 2006; Fraj & Martínez, 2006; D'Souza et al., 2007; Mostafa, 2009). Kuşçu (2019) states that the perceived benefits of green products are needed to be highlighted not only by the companies (micro perspective) but also by the governments (macro perspective) in order to enhance the awareness of the consumers. In a similar vein, research suggests that environmentally safe packaging and green product purchase intention are linked positively with each other (Schwepker & Comwell 1991) and this would also lead to post-purchase behavior, like recycling (Shrum et al., 1994). Hence, shifting the products into green may seem expensive in the short term, but on the other hand, that will result to be advantageous,

logical and cost-wise in the long term, which increases the "green purchase intention" of the consumers.

Consumers are also found to influence their social groups to have the same approach towards green products. Some researchers have investigated the effects of social norms, group conformity, and personal values on green purchase behavior (Kaiser et al., 1999; Kalafatis et al., 1999; Kim & Chung, 2011; Park & Sohn, 2012). These factors not only influence consumers' attitudes towards green products, but also enable them to improve their self-image and social identity. Collective selfesteem describes the importance consumers place on their group memberships. Group associations give social recognition and identity. The value, an individual places on group membership, influences his/her product choice and purchase decision (Tajfel & Turner, 1979; Tajfel, 1982; Kim & Omizo, 2005). In cultures such as Turkey, where social conformance is important, consumers purchase products that help them conform to social norms and values. Some suggests that collectivism and individualism, serving the essential reliance about people's interactions and relationships with other people, might have some influence on individuals' environmental behaviors (McCarty & Shrum 1994; 2001; Kim & Choi 2005;). Similarly, Chan (2001) finds that collectivism has a positive influence on the green product purchase behavior in the major cities in China. Kim and Choi (2005) find that the values and beliefs influence green product purchase behavior in collectivistic cultures. Kaufmann et al (2012) also indicate that green product purchase intention is high in collectivistic cultures. As collectivistic people are more united with the group and have a tendency to help and influence others and show concern of society and environment (Hofstede, 1980), they are also more likely to recycle as a postpurchase behavior (McCarty & Shrum, 1994). Individuals from collectivist cultures would prefer activities which may benefit the society in the future (Ercis et al., 2016). On the other hand, it is found that individualistic people when compared to collectivists consider recycling as less important (McCarty & Shrum 2001). In theory, values could stimulate and affect the behavior (Carman, 1978; Williams, 1979). In various studies, collectivistic people are observed to give up their personal motivations in order to take actions for the sake of their groups. So, collectivistic people tend to protect environment for the sake and the better future of their group (McCarty & Shrum, 1994), because collectivism cares about the effects to their society. Hjelmar (2011) states that consumers with children are influenced by their parent groups while buying organic food products, because group of parents may influence each other for the products that are suitable best for their kids. Some studies on green purchase behavior discuss the influence of values in groups (Jansson et al., 2010; Kim & Chung, 2011). For instance, Lee (2008) states that social groups' norms influenced green purchase decision. Consumers are prone to purchase products which improve their self-image within groups, and they might buy green products if the products improve a consumer's status within the group. So, the first hypothesis

examining the influence of collective self-esteem on green product purchase intention is formulated below.

**H1:** Collective self-esteem positively influences consumers' green product purchase intentions.

Another factor discussed within literature is the social influence experienced within green purchase behavior (Lee, 2009; Young et al., 2010; Cheah & Phau, 2011). In this vein of research, it is suggested that social norms and values are important in predicting consumers' acceptance of green brands (Lee, 2009; Cheah & Phau, 2011; Park & Sohn, 2012). In general, several theories (i.e., the theory of planned behavior, Ajzen, 1991) have figured the role of social influence on green fashion consumption. As for example, Manchiraju et al. (2012) identify that social norms (or influence) directly influence an individual's behavioral intention to engage in sustainable green fashion consumption. Likewise, various studies (Lee, 2008; Peattie, 2010) have figured the significance of social influence on individual's green consumption. For instance, Lee (2008) proposes a theoretical model with seven predictor variables for green consumption behavior, out of which social influence is found to be the strongest predictor among adolescent Chinese consumers. Similar findings in which others' impact on behavior (green consumption or otherwise) has been noted by several ethnographic studies (Cervellon & Wernerfelt, 2012). Kalafatis et al. (1999) apply Ajzen's Theory of Planned Behavior to examine the factors that affects consumers in the UK and Greece regarding their intentions to purchase green products. In another study, Park and Sohn (2012) study the role of social influence (injunctive and descriptive) on the environmentally friendly behavior of consumers. Social influence, personal environment norms, and selfcontrol behavior affect environmentally friendly behavior. Cheah and Phau (2011) indicate that eco-literacy, interpersonal influence, and value orientation influence Australian consumers' attitudes towards green products. Consumers with favorable attitudes are likely to purchase environmentally friendly products. As can be seen from previous studies conducted in different settings, social influence is an important predictor for green purchase intention. Our second hypothesis is therefore:

**H2:** Social influence positively affects consumers' green product purchase intentions.

Attitudes are also turned out to be a significant predictor for consumer's willingness to pay more to a green product (Laroche et al., 2001). Consumers consider themselves as green consumers when they make environmentally friendly moves (Thøgersen & Crompton, 2009). Altruistic values, environmental concern, attitudes and green product knowledge of the individual influence green product purchase intention significantly (Mostafa, 2007). But the environmental concern does not always end up with green product purchase. A survey conducted in Korea shows that the gap between the attitude and behavior is considerable according to TNS2008 report. That means the consumers who are concerned about the

environment do not always intend to purchase a product that does not harm the environment. Balderjahn (1988) conducts a study in Germany and states that consumer's positive attitudes towards environment concluded in purchasing. Rundmo (1999) argues that the attitudes towards promotions which are focused on health and concerns for environment significantly influence environmental behavior and intention to purchase green products (for example, organic foods).

Hence, social influence and collective self-esteem are not the main contributors in purchasing green products. Consumers intentions to buy green products may be referred to their attitudes towards green products. This study examines collective self-esteem and social influence as an antecedent of attitude towards green products, thereby providing insight into attitude towards green product that plays a mediating role between social influence and corporate selfesteem and green product purchase intention. Our third and fourth hypotheses are therefore:

**H3:** The relationship between collective self-esteem and green product purchase intention is mediated by attitude towards green product.

**H4:** The relationship between social influence and green product purchase intention is mediated by attitude towards green product.

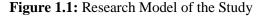
Demographic variables, especially generational cohorts, have been identified in previous research to affect purchase intentions (Williams, 2005; Parment, 2013; Lissitsa & Kol, 2016). Generational cohorts are defined as groups of people sharing the same events in their life of a certain period and some studies were carried out to determine a relationship between generation cohorts and purchase intentions (Lissitsa & Kol, 2016). Values, behaviors and choices are believed to differ in each generational cohort, as such each generation has a different taste or choice that results in different attitude or behavior (Parment, 2013). According to previous studies, Generation X, which consists of individuals born between 1961 and 1979 (Lissitsa & Kol, 2016), is taking purchase decisions upon traditional search. In other words, they want to observe the products' features and check what other people think about this product. They always read the feedbacks and reviews of other users. Generation X values word-of-mouth and wants to comfort themselves when making purchase decisions (Lissitsa & Kol, 2016). Customer convenience and relations with the community is what Generation X takes into account while purchasing a product (Williams, 2005). On the opposite, Generation Y, who are individuals born between 1980 and 1999, is considered to be fast decision makers whilst taking little consultation from others and is considered to be impulsive and fast in making purchase while comparing with Generation X consumers (Parment, 2013). Studies that analyze and compare purchase intention of Gen X and Gen Y towards green products establish that there are differences between the generations (Mark & Law, 2015; Fauzi & Hasim, 2015; Göksu et al., 2017). For instance, environmental concern is found to influence purchasing of green products in Gen Y

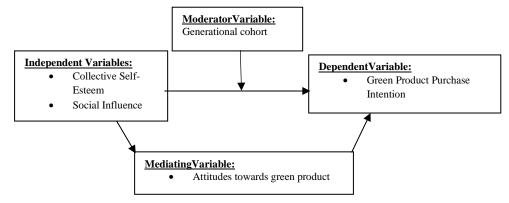
whilst perceived effectiveness is stronger for Gen X consumers (Mark & Law, 2015). Yet, Gen X is found to be more prone to buy green products when compared to Gen Y and Gen Xers are more environmentally conscious and feeling responsible for the environment (Göksu et al., 2017) and are more sensitive towards pro-environmental consumption (Mark & Law, 2015). Accordingly, the following hypotheses are developed;

**H5:** For the Gen X consumers, the influence of collective self-esteem on green product purchase intention is stronger compared to Gen Y consumers.

**H6:** For the Gen X consumers, the social influence on green product purchase intention is stronger compared to Gen Y consumers.

In accordance with the literature delineated above and the hypotheses developed, the research model is presented below.





### **RESEARCH METHODOLOGY**

#### **Preparation of Questionnaire Form**

The questionnaire used in the study contains measures for collective selfesteem (CSE), social influence (SI), attitude towards green products (ATGP), green product purchase intention (GPPI) as well as categorical questions assessing demographic variables, only age was asked using a ratio scale. The collective selfesteem (CSE) scale, created originally by Luhtanen and Crocker (1992) and implemented by Khare et al. (2013), has fourteen items in total. Social Influence scale developed by several articles (Leonidou et al. 2011; Thepa & Verma, 2012; Do Paço et al. 2013; Dutta, 2014) has five items. ATGP scale has been measured by three items developed by Bruner et al. (2009). Finally, GPPI scale was developed by Mostafa (2007) and measured by two questions. The questionnaire was translated to Turkish and back-translated to English and responses were recorded on a five-point Likert scale. Initially, a pre-test with 50 people was conducted and corrections were made considering pre-test results and questionnaire was finalized before its implementation.

### Sampling process

Istanbul has been chosen for the data collection of the study. With many organic markets and majority of the green products sold in Istanbul, it is the main target market of most green products. Hypermarkets take the first spot among the places where consumers can find green foods the most, while supermarkets and organic stores take the second place. In recent years, organic markets have been on the agenda and are established with the permission of the municipalities on a certain day of the week (Lüleci, 2012). It is seen that the majority of these markets, which enable organic and green products to reach the producers from the shortest way, are set in Istanbul (Gülnur et al, 2016). Gathering data was completed in a two months period with a convenience sample of 370 people living in Istanbul.

## FINDINGS AND ANALYSIS

# **Descriptive Statistics**

Table 3.1. provides demographic characteristics of the sample. Majority is female, having a university education and between 26 and 35 years old.

Generational cohort have been determined by the age of respondents which was captured with a ratio scale.

Gender	Frequency	Percentage
Male	118	31,90%
Female	249	67,30%
Not Specified	3	0,80%
Age	Frequency	Percentage
16-25	30	8,00%
26-35	181	49,00%
36-50	80	22,00%
51-65	61	16,00%
Above 66	3	1,00%
Not Specified	15	4,00%
Education	Frequency	Percentage
Primary	4	1,10%
Secondary	42	11,40%
University (2 years)	32	8,60%
University (4 years)	177	47,80%
Master's Degree	98	26,50%
PhD	16	4,30%
Not Specified	1	0,30%

**Table 3.1:** Descriptive Analysis of the Respondents

## **Factor and Reliability Analyses**

After descriptive analysis of all variables, factor analysis with varimax rotation and reliability analyses have been performed. Within factor analysis, double loading items and low loading items (lower than 0,5) have been eliminated due to these factors and the factor as well as reliability analysis have been repeated to reach a valid item structure. Within factor analysis, KMO values are found to exceed the threshold of 0.5 (0,78 for CSE, 0,839 for SI, 0,658 for ATGP and 0,5 for GPPI). So, according to KMO values, analyses are statistically significant. The descriptive analyses' outcomes, as well as results of factor and reliability analyses are presented in table 3.2. As can be seen, the dimensional structure is as expected and according to the results of reliability analyses, since Cronbach's alpha of all CSE, SI, ATGP and GPPI items are above 0.7, the measures used in the study can be considered as between fairly reliable and highly reliable. Hence, we have moved on with hypotheses testing.

VARIABLES	QUESTIONS	MEAN	ST. DEVIATION	ST. DEVIATION FACTOR LOADING	VARIANCE EXPLAINED %	RELIABILITY
	I feel good about the social groups I belong to.	4,1811	0,84723	0,775		
	Overall, my social groups are considered good by others.	4,1108	0,83041	0,756		
CSE	In general, others respect the social groups that I am a member of.	4,1	0,87621	0,747	54,58	0,788
	In general, I am glad be a member of the social groups I belong to.	4,1459	0,8867	0,718		
	I am a worthy member of the social group I belong to.	4,0162	1,01199	0,695		
	I recommend eco-friendly products to my friends/family.	3,9378	1,10379	0,88		
	I hear and pay attention to my friends/family opinion concerning eco- friendly products.	3,9703	1,03943	0,85		
IS	I have asked my family to recycle some of the things we use.	3,9486	1,18485	0,824	62,4	0,838
	I have convinced members of my family or friends not to buy some products that are harmful to the environment.	3,6811	1,17836	0,785		
	I keep track of my neighbors, friends and relatives those who raise $3,2568$ voices on environment issues.	3,2568	1,25005	0,573		
	I would describe myself as environmentally $\dots$ (1= irresponsible; 5= responsible)	4,4432	0,82197 0	0,85		
ATGP	It is (1=interesting/5=boring) to spend time for environment.	4,3378	0,80103	0,788	64,44	0,724
	I have a $(1 = negative/5 = positive)$ attitude toward the eco-friendly products.	4,5351	0,78268 0	0,768		
GPPI	I have a (1= negative/5= positive) attitude towards purchasing a green version of a product.	4,4243	0,92888	0,921	84,86	0.818
	Purchasing green is a(1= bad/5= good) idea.	4,4838	0,82047	0,921	,	

#### **Regression Analyses and Results**

In order to comprehend and evaluate each predictor variable's individual importance and influence on green product purchase intention, stepwise regression method was used to reach the most significant model. For the first regression model, social influence (SI) appeared as the predictor variable for green product purchase intention (GPPI) ( $R^2 = .162$ , p = 0.00). The initial model suggested that SI accounted for 16.2% of GPPI. When SI and CSE were both added as predictors of GPPI, the model explained 18,4% of green product purchase intention with  $\beta$ (SI)=0.134 and  $\beta$ (CSE)=0.078. Thus, H1 and H2 were both accepted.

To test for the mediating effect of ATGP, the stepwise approach suggested by Baron and Kenny (1986) were used. In the first step, we examined that CSE had a significant effect ( $\beta$ =0,130, P=0,000) on ATGP with CSE explaining 4,6% of the variance. In the second step, we found that ATGP had a significant effect ( $\beta$ =0,637, P=0,000) on GPPI with ATGP explaining 40,4 % of the variance. In the third step, we found that when both CSE and ATGP were added to the model that CSE and GPPI relationship was still significant, but the effect was decreased ( $\beta$ =0,049, P=0,016), so we can say that it is partially mediated with ATGP and CSE together explaining 41,2% of the variance.

The same steps were followed for SI as well and we found that SI had a significant effect on ATGP ( $\beta$ =0,215, P=0,000) with SI explaining 24,8% of the variance. In the second step, we found that ATGP had a significant effect ( $\beta$ =0,637, P=0,000) on GPPI with ATGP explaining 40,4 % of the variance. In the final step, it was found that SI and ATGP were added to the model. SI and GPPI relationship was still significant but the effect had decreased ( $\beta$ =0,042, P=0,016), so we can say that it was partially mediated. ATGP and SI together explained 41,3% of the variance. Thus, H3 and H4 were accepted.

To test for hypotheses 5 and 6, a moderated regression was employed. By using the case 2 model in Baron and Kenny (1986), a regression analysis was administered. Regression model 5 and 6 carried out in order to examine exposure level of GPPI from CSE and SI moderated by Gen X (n= 62) and it was found out to be statistically insignificant (p=0,079>0,05). CSE and SI of Gen X respondents explained 26,8% of variance. This measured the proportion of the variation in GPPI. Same test was carried out in order to examine exposure level of GPPI from CSE and SI moderated by Gen Y (n=251). It was found out to be statistically significant for SI (p=0,000<0,05) and CSE (p=0,079<0,05). However, CSE rate on Gen Y respondents decreased to 15,2% of variance. In order to test the difference of the regression coefficients between the generation cohorts, the results between regression coefficients were tested as performed by Cohen and Cohen (1983) in this study. Correlating intentions were measured separately for each generational cohort as the moderator was a dichotomy and the independent variables were continuous. Each correlation coefficient was converted into a z-score and tail 1 and tail 2 are calculated. First CSE was administered with n=62,  $\beta$ =0.081 for Gen X consumers and n=251,  $\beta$ =0.095 for Gen Y and the z-score was found -0.097, 1-tail p= 0.461201 and 2-tail p= 0.922402 as the outputs. Secondly, SI was administered with n=62,  $\beta$ =0.158 for Gen X consumers and n=251,  $\beta$ =0.125 for Gen Y and the z-score was found 0.233, 1-tail p= 0.408075 and 2-tail p= 0.816149 as the outputs. So, as the difference between the generations in case of CSE was found to be statistically insignificant, so H5 was rejected. On the contrary, in case of SI, generational differences were found to be statistically significant and the beta coefficients were high on Gen X than Gen Y, so H6 was accepted.

#### **Conclusion of the Research**

According to the results of the regression analyses, positive yet weak effects of CSE and SI are found on GPPI. Also, the influence of CSE on GPPI moderated by the generation cohort differences is discovered to be positive. When it comes to the effect of CSE and SI on GPPI, it is partially mediated by ATTP. In terms of the generation influence, according to the analysis, it is found out that social factors play different roles in different generations in shaping purchase intention. More specifically, for Gen X consumers SI has a higher influence of CSE on purchase intention is insignificant. As a result, all hypotheses of the study are accepted except H5.

### DISCUSSION

The aim of this study is to investigate consumers' intentions for green product purchase and to explore the relationship between collective self-esteem, social influence and attitudes towards green products and generational cohorts of consumers in Istanbul/Turkey. As the residents in Istanbul have a significant market share due to living in the most crowded city in Turkey, specifically their intentions towards green products were studied within this study.

This study shows that social influence, collective self-esteem and attitude towards green products have a positive effect on green product purchase. Especially, the indirect effect of social influence on green purchase intention has clearly emerged as an important factor, which suggests that companies should involve more people in their green initiatives. Moreover, Lee (2008) finds out that social influence is the strongest predictor for green consumption. Our findings support this and show that social influence plays an important role in acceptance of green products in Turkey. Being a collectivist society, Turkish consumers are influenced by the opinions of other people. Hence, recommendations from family, friends and colleagues can lead to higher acceptance/adoption of green products and green products can further be used to symbolize an environmentally friendly lifestyle. Kim and Choi (2005) point out that collectivism, environmental concern and perceived consumer effectiveness are the three factors that influence pro-environmental behavior of consumers.

Although social factors that play a significant role especially in collectivistic cultures are studied in the context of green consumption, there are contradictory findings. Whilst some studies indicate that social factors are not effective in consumers' green consumption (Varshneya et al., 2017), others mention a strong link between social influence on green purchase behavior (Dagher & Itani, 2012). Adding to this confusion, Wang (2014) indicates that the impact of the social environment varies due to other factors. In the current study, attitude is shown to mediate the relationship between social factors and behavior. According to prior research, attitude is one of the most significant predictors for interpreting the plan to buy green products (Irland, 1993; Tsen et al., 2006; Paul et al., 2016; Mostafa, 2007; Ritter et al., 2014; Zhao et al., 2014; Arli et al., 2018). A study about the consumption behavior by Zhang et al. (2019) shows that intention to buy organic apparel and household appliances with low energy are significantly influenced by attitude. Attitude towards green consumption behavior in Taiwan is observed to be significant positive predictor of purchase intent towards green products (Wu & Chen, 2014; Chen & Hung, 2016; Hsu et al., 2017). Jaiswan and Kant (2018) also study the green product purchase behavior determinants in India and find that intention to buy green products are significantly influenced by attitude. Despite the prevalence of the attitude-behavior link established in literature, there are also studies such as Moser (2015) that find no significant effect of attitude on actual purchase behavior, as some attitudes towards the environment do not result in actual purchase behavior. The current study shows that social factors shape attitudes and then behavior towards green consumption and hence enhances literature on these factors within the context of green consumption.

Another finding of the study is thus the effect of attitude towards green products in increasing the influence of both social influence and collective selfesteem on purchase intention. Mostafa (2007) states that altruism, attitude, environmental concern and environmental knowledge affect the behavior of consumers green product purchase. In order to increase the positive attitude towards green consumerism, consumers should be well educated for what is good for a sustainable environment. As the awareness towards green products and services is considered low, various studies suggest that creating awareness for green products should be companies' priority (Mostafa, 2007; Young et al., 2010; Rahbar & Wahid, 2011). Marketing department of companies can use influencers while setting their promotional strategies. Use of social groups in advertisements can lead to a change in consumer attitude towards green products. Advertising campaigns should relate buying green products to being socially conscious and modern. Users of green products can be depicted as being better respected in their social groups due to their association with environmentally friendly products. Even though the environmental issues can be perceived as a threat by the marketers, it can also become an opportunity that can be rendered in favor for the marketers.

The second contribution of the study lies in the finding that green behavior of Turkish consumers varies with respect to generational differences. This study adds to scarce literature dealing with the effect of demographic variables, especially the generational cohorts and the divergence between Gen X and Gen Y. For Gen X consumers impact of social influence on green product purchase intention is stronger than Gen Yers. Our findings therefore support previous research that Gen Xers' green product consumption intention is shaped by the opinions and values of the others but contradicts prior studies in stating that Gen Xers are more environmentally conscious and feeling responsible for the environment (Göksu et al., 2017) and are more sensitive towards pro-environmental consumption (Mark & Law, 2015).

As the scarce resources are used dramatically due to rapid industrialization and unconscious consumption for the last three decades, the concern towards environment has increased and consumers started to consider using products that have less effect towards the environment. Thus, many companies changed their strategies and have started to offer products manufactured from environmentally friendly or recycled materials. As a consequence, green marketing thought has sprung. Besides the consumers who are needed to be careful about the environment, companies also play a critical role in this game. The environmental practices are thought to be increased with the improvement of the education level of the society and the environmental awareness to be created by the influence of the media. Companies are needed to be clear to show their efforts for being sustainable. They should indicate how they care for the environment to the consumers who may start Word-of-Mouth, as trust and influence are critical factors. They should make TV or newspaper/magazine ads of their sustainability efforts in order to reach the mass to create awareness. For example, according to the sustainability report of Anadolu Efes for 2018, they ran a Can and Can Pop Tab Reduction Project and they achieved a reduction of 214,223 kg of cans and 181,224 kg of can pop tabs for the past three years. According to the sustainability report of Turkish Airlines for 2018, 4,235,000 sheets of paper were saved thanks to electronic ticketing system which is equal to preventing approximately 53 trees. Sisecam developed a project to achieve the "zero waste" objective, which was the objective of the Integrated Waste Management approach and it was called "Care For Next", according to the Sustainability Report published in 2018, all recyclable wastes were recycled, and non-recyclable wastes were sent to facilities with the necessary documents and permits for final disposal. In 2018, Sisecam ensured that 54% of the packaging waste from the market was recovered. Approximately 16,500 tons of paper, cardboard, plastic and wood were recycled. Arcelik also started the Green Purchasing Movement in order to purchase environmentally friendly products, materials and services with the principle of being a responsible manufacturer. Arcelik purchased 83% of product packing from FSCcertified sources that consists of 100% recyclable cardboard, recyclable plastic and

ISPM-certified wooden pallets according to its' Sustainability Report of 2017. This important information should be forwarded to the end user from media channels. The environmental practices are thought to be increased with the improvement of the education level of the society and the environmental awareness to be created by the influence of the media.

### LIMITATIONS AND FUTURE RESEARCH

As individualism and collectivism can be found in the same culture, the effect of collective self-esteem is found significant but weak in the findings from the sample. Thus, independent and interdependent self-construal may be added as the independent variables in the same model for further studies and future research could be developed further by investigating the impact of other psychographic variables useful in environmental profile.

As it is common in social sciences, the research is prone to common method biases (Podsakoff et al., 2003). In addition, this study was only examined in Istanbul. Even though Istanbul as the biggest city in Turkey with the highest number of internal migration rate and number of green markets/retailer in the country can provide a representative sample of green consumers, further research could be applied to other groups of consumers living in other cities of Turkey. Further, the study analyses consumers' general attitudes as well as general behavioral intentions towards green products. Category related differences may prevail and need to be studied as well. Another shortcoming of study is that it is cross-sectional. Experimental designs that collect real purchase may add to the findings.

Despite the fact that there is a growing interest on the intention to buy green products conducted in emerging economies, not only research on this topic is still limited in Turkey (Zengin & Kumcu, 2018) but also validation of the research instrument in Turkish with different consumer groups is also important, because a scale which has been adopted in one country may not perform in the same way in another country (Liobikiene et al., 2016). In this study the validity of the collective self-esteem scale which is developed by Crocker and Luhtanen (1990 and has been used comprehensively in Western countries to study consumers' buying behavior, was analyzed in a collectivist culture and its relationship with green purchase intention in Turkey was demonstrated. Yet, there are other measures that need to be tested in this context. Hence, further research on green consumption in Turkey is highly recommended.

Another fruitful venue for future research lies in studying demographic differences. The literature can be enhanced on the purchase intention of Gen X and Gen Y, since verifying these findings is important as the outcomes may differ from developing to developed economies because consumers with low income level are acting price oriented and hardly embrace green premium products in developing

countries (Phan et al., 2017). Also, different income and educational groups may have different attitudes towards green consumption.

#### REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50 (2), 179-211.

Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. International journal of consumer studies, 42 (4), 389-401.

Balderjahn, I. (1988). Personality variables and environmental attitudes as predictors of ecologically responsible consumption patterns. Journal of business Research, 17 (1), 51-56.

Bang, H. K., Ellinger, A. E., Hadjimarcou, J., & Traichal, P. A. (2000). Consumer concern, knowledge, belief, and attitude toward renewable energy: An application of the reasoned action theory. *Psychology & Marketing*, 17(6), 449-468.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of personality and social psychology, 51 (6), 1173.

Bhattacharya, S. (2011). Consumer attitude towards green marketing in India. IUP Journal of Marketing Management, 10(4).

Bruner, G. C., Hensel, P. J., & James, K. E. (2001). Marketing scales handbook. Chicago: American Marketing Association.

Carman, J. M. (1978). "Values and Consumption Patterns: a Closed Loop", in NA - Advances in Consumer Research Volume 05, eds. Kent Hunt, Ann Abor, MI : Association for Consumer Research, Pages: 403-407.

Cervellon, M. C., & Wernerfelt, A. S. (2012). Knowledge sharing among green fashion communities online: Lessons for the sustainable supply chain. Journal of fashion marketing and management: An international journal, 16(2), 176-192.

Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. Psychology & marketing, 18(4), 389-413.

Cheah, I., & Phau, I. (2011). Attitudes towards environmentally friendly products: The influence of ecoliteracy, interpersonal influence and value orientation. Marketing Intelligence & Planning, 29(5), 452-472.

Chen, S. C., & Hung, C. W. (2016). Elucidating the factors influencing the acceptance of green products: An extension of theory of planned behavior. Technological Forecasting and Social Change, 112, 155-163.

Coddington, W. (1993). Environmental marketing: positive strategies for reaching the green consumer. McGraw-Hill Companies.

Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. Journal of personality and social psychology, 58(1), 60.

D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 69-78.

Dagher, G., & Itani, O. (2012). The influence of environmental attitude, environmental concern and social influence on green purchasing behavior. *Review* of Business Research, 12(2), 104-111.

do Paço, A., Alves, H., Shiel, C., & Filho, W. L. (2013). Development of a green consumer behaviour model. *International Journal of Consumer Studies*, *37*(4), 414-421.

Dutta, K., Umashankar, V., Choi, G., & Parsa, H. G. (2008). A comparative study of consumers' green practice orientation in India and the United States: A study from the restaurant industry. *Journal of Foodservice Business Research*, *11*(3), 269-285.

Ercis, A., Kurnuç, M., & Türk, B. (2016). Kolektivist Kültür, Yeşil Tutum Ve Davranişin Yeşil Ürünlere Daha Fazla Ödeme İsteği Üzerindeki Etkisi. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 160-178.

Fauzi, N. F. S. N., & Hashim, R. A. (2015). Generation X and purchase intention toward green cosmetic and skin care products. *OUM International Journal of Business and Management*, 1(2), 79-91.

Fraj, E., Martínez, E., & Matute, J. (2011). Green marketing strategy and the firm's performance: the moderating role of environmental culture. *Journal of Strategic Marketing*, *19*(4), 339-355.

Göksu, N., Koska, A., & Erdem, M. B. (2017). X ve Y Kuşaklarının Çevre Dostu Ürünleri Kullanım Eğilimleri. *Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi*, 5(3), 109-122.

Gülnur, E. T. İ., Anıl, N. K., & Kılıç, B. (2016). Tüketicilerin Organik Gıda Satın Alma Tercihlerini Etkileyen Faktörler. *Kırklareli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 5(2), 93-108.

Hjelmar, U. (2011). Consumers' purchase of organic food products. A matter of convenience and reflexive practices. *Appetite*, *56*(2), 336-344.

Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 10(4), 15-41.

Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. Journal of Retailing and Consumer Services, 34, 145-152.

Irland, L. C. (1993). Wood producers face green marketing era: Environmentally Sound Products. Wood Technology, 120(2), 34-36.

Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. Journal of Retailing and Consumer Services, 41, 60-69.

Jansson, J., Marell, A., & Nordlund, A. (2010). Green consumer behavior: determinants of curtailment and eco-innovation adoption. Journal of consumer marketing, 27(4), 358-370.

Kalafatis, S. P., Pollard, M., East, R., &Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: a cross-market examination. Journal of consumer marketing, 16(5), 441-460.

Kaufmann, H. R., Panni, M. F. A. K., & Orphanidou, Y. (2012). Factors affecting consumers' green purchasing behavior: An integrated conceptual framework. Amfiteatru Economic Journal, 14(31), 50-69.

Kilbourne, W., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. Journal of Business Research, 61(9), 885-893.

Kim, Y., & Choi, S. M. (2005). Antecedents of Green Purchase Behavior: an Examination of Collectivism, Environmental Concern, and Pce", in NA -Advances in Consumer Research Volume 32, eds. Geeta Menon and Akshav R. Rao, Duluth, MN : Association for Consumer Research, Pages: 592-599.

Kuscu, A. (2019). Green Marketing and Branding: Combining Micro and Macro Perspectives to Achieve a Circular Economy. In The Circular Economy and Its Implications on Sustainability and the Green Supply Chain (pp. 213-229). IGI Global.

Laroche, M., Bergeron, J., &Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. Journal of consumer marketing, 18(6), 503-520.

Lee, K. (2008). Opportunities for green marketing: young consumers. Marketing intelligence & planning, 26(6), 573-586.

Leonidou, L. C., Leonidou, C. N., Palihawadana, D., & Hultman, M. (2011). Evaluating the green advertising practices of international firms: a trend analysis. International Marketing Review, 28(1), 6-33.

Levin, G. (1990). Consumers turning green: JWT survey. Advertising Age, 61(47), 61-74.

Ling-Yee, L. (1997). Effect of collectivist orientation and ecological attitude on actual environmental commitment: The moderating role of consumer demographics and product involvement. *Journal of international consumer marketing*, 9(4), 31-53.

Liobikienė, G., Mandravickaitė, J., & Bernatonienė, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, *125*, 38-46.

Lissitsa, S., & Kol, O. (2016). Generation X vs. Generation Y–A decade of online shopping. *Journal of Retailing and Consumer Services*, *31*, 304-312.

Lüleci, S. (2012). İzmir'de organik gıdalara ilişkin tüketici davranışlarını belirlemeye yönelik bir araştırma (Doctoral dissertation, DEÜ Sosyal Bilimleri Enstitüsü).

Mark, N., & Law, M. (2015). Encouraging green purchase behaviours of Hong Kong consumers. *Asian Journal of Business Research ISSN*, 5(2), 2015.

McCarty, J. A., & Shrum, L. J. (1994). The recycling of solid wastes: Personal values, value orientations, and attitudes about recycling as antecedents of recycling behavior. *Journal of Business Research*, *30*(1), 53-62.

McCarty, J. A., & Shrum, L. J. (2001). The influence of individualism, collectivism, and locus of control on environmental beliefs and behavior. *Journal of Public Policy & Marketing*, 20(1), 93-104.

Moser, A. K. (2015). Thinking green, buying green? Drivers of proenvironmental purchasing behavior. *Journal of consumer marketing*, 32(3), 167-175.

Mostafa, M. M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, *31*(3), 220-229.

Mostafa, M. M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology & Marketing*, 24(5), 445-473.

Park, S. Y., & Sohn, S. H. (2012). Exploring the normative influences of social norms on individual environmental behavior. *Journal of Global Scholars of Marketing Science*, 22(2), 183-194.

Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of retailing and consumer services*, 20(2), 189-199.

Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.

Peattie, K. (2001). Golden goose or wild goose? The hunt for the green consumer. *Business Strategy and the Environment*, *10*(4), 187-199.

Peattie, K. (2010). Green consumption: behavior and norms. *Annual review* of environment and resources, 35, 195-228.

Phan, T. T. H., Cao, T. K., & Nguyen, H. V. (2017). Green purchase behavior: mitigating barriers in developing countries. *Strategic Direction*, *33*(8), 4-6.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879-903.

Polonsky, M. J., & Rosenberger III, P. J. (2001). Reevaluating green marketing: A strategic approach. *Business horizons*, 44(5), 21-30.

Ritter, Á. M., Borchardt, M., Vaccaro, G. L., Pereira, G. M., & Almeida, F. (2015). Motivations for promoting the consumption of green products in an emerging country: exploring attitudes of Brazilian consumers. *Journal of Cleaner Production*, *106*, 507-520.

Rundmo, T. (1999). Perceived risk, health and consumer behaviour. *Journal* of Risk Research, 2(3), 187-200.

Sadachar, A., Khare, A., & Manchiraju, S. (2016). The role of consumer susceptibility to interpersonal influence in predicting green apparel consumption behavior of American youth. *Atlantic Marketing Journal*, *5*(1), 1

Schwepker Jr, C. H., & Cornwell, T. B. (1991). An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products. *Journal of Public Policy & Marketing*, 77-101.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.

Shrum, L. J., Lowrey, T. M., & McCarty, J. A. (1994). Recycling as a marketing problem: A framework for strategy development. *Psychology & Marketing*, *11*(4), 393-416.

Thøgersen, J., & Crompton, T. (2009). Simple and painless? The limitations of spillover in environmental campaigning. *Journal of Consumer Policy*, *32*(2), 141-163.

Tsen, C. H., Phang, G., Hasan, H., & Buncha, M. R. (2006). Going Green: A Study Of Consumers' Willingness To Pay For Green Products in Kota Kinabalu. *International Journal of Business and Society*, 7(2), 40.

Wu, S. I., & Chen, J. Y. (2014). A model of green consumption behavior constructed by the theory of planned behavior. *International Journal of Marketing Studies*, 6(5), 119-132

Uydacı, M. (2002). Yeşil pazarlama: iş ahlakı ve çevresellik açısından yaklaşımlar. Istanbul-Turkey: Türkmen Kitabevi.

Zengin, A. Y., & Kumcu, E. H. Green Consciousness And Intention To Purchase Green Product: A Comparison Between Generation Y And Z. In *International Congress Of Business, Economics And Marketing* (P. 177), 186-203.

Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, 63, 143-151.

Zhang, L., Fan, Y., Zhang, W., & Zhang, S. (2019). Extending the theory of planned behavior to explain the effects of cognitive factors across different kinds of green products. *Sustainability*, *11* (15), 4222.