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ENVIRONMENTALIST PREDISPOSITIONS AND RECYCLED PRODUCT PREFERENCES

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Abstract

The study aims to uncover "environmentalist predispositions" based on the Big Five Personality with support of the theory of planned behavior and examines the effects of environmentalists' predispositions on the recycled product preferences. Based on the big five personality traits, this paper proposes a typology on the environmentalists' predispositions for conscious consumption studies, which consists of concern, pleasure, consciousness, beliefs, and norms. The method of the empirical study is a self-reported survey with a sample of 256 participants from a developing economy. The results of the factor analyses confirm the five-dimensional theoretical construct of individuals' predispositions towards environmentalism. Furthermore, multiple regression analyses for testing the associations of the environmentalist predispositions on recycled product preferences disclose that among five of the dimensions, environmentalist consciousness, environmentalist beliefs, and environmentalist norms have joint effects on preferring a recycled product. This study is one of the preliminary attempts that examines the effects of environmentalist predispositions on a conscious consumption choice, specifically on preferring the recycled products, as a green purchasing behavior type.

Keywords: Recycled Product Preferences, Predispositions, Big Five, Green Behavior

JEL Codes: M39, Q56, *Q53, C38*

Introduction

Increasing awareness of the environment positively alters the consumer behaviors beginning from the 1970s (Kinnear et al., 1974; Alwitt & Pitts, 1996).

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Thus, the concern towards the environment continues not only as an essential public matter but also has become an important subject for the researchers (Groening et al., 2018). The consumers' active expressions of their concerns for the environment (Hanss & Böhm, 2012; Guide & Li, 2010) transform the individual recycling-behavior into norms in many societies (Yadav & Pathak, 2016; Ramayah et al., 2010). Environmental concern is one of the predispositions of individuals who define themselves as an environmentalist and overt green behaviors (Brick & Lewis, 2014). The commitment of policymakers on environmental management (Liu et al., 2017), the environmentalist norms that originate from communities for a sustainable future (Heyes & Kapur, 2012), and the inter-influences of peers on sustainability issues (Suki, 2016) overt an important green-attitude, the recycling behavior. In the study of Liu et al. (2017), decision-makers mostly use environmentalism in their strategic plans and consider the performance of environmental practices, which in turn influence the public opinion to present environmentalist behaviors. The increase in individuals' environmental concern forces the patterns of business ethics through consumer behavior, thus businesspersons search for discovering new ways of minimizing wastage of scarce resources for both consumers and their businesses (Liu et al., 2017; Heyes & Kapur, 2012). Though the streams of "prevent the production of waste" and/or "leave the environment as it is" draw social attention for recycling behaviors (Trudel et al., 2014; Mobley et al., 1995), the predictors of choosing recycled products lack in the literature.

Accordingly, a new consumption philosophy preventing the destruction of nature, the green purchasing started (Suki, 2016). Instead of conventional purchases, consumers search for environmental-friendly options (Akehurst et al., 2012; Barber et al., 2010). Although consumers prefer the environmental-friendly products regarding various individual factors such as willingness to pay for higher prices (Moore et al., 2006), the literature lacks providing evidence on the underlying individual factors of green purchasing. Specifically, the evidence on personality-based predictors of preferring the recycled products is under-researched. Therefore, this study specifically addresses the following questions. 1. What can be the environmentalist predispositions of individuals based on a personality for conscious consumption? 2. Which of the environmentalist predispositions predict the recycled product preferences?

In our efforts searching for good predictors of green purchasing and specifically for recycled products, the literature provides a starting point by relating the personality traits to green purchasing (Poskus & Zukauskiene, 2017). However, the literature remains limited to examining the psychological traits that trigger green behavior because researchers frequently associate the Big Five Personality Traits (BFPT) to green purchasing (Busic-Sontic et al., 2017).

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Therefore, this study intends to open a new discussion on the environmentalist intentions that have origins of the BFPT. Accordingly, this study proposes a typology of environmentalist intentions based on the big five personality studies by presuming the environmentalist intentions are the extensions of them. Second, predicting the green purchasing preference with the environmentalist intentions is yet a literature gap. Thus, by investigating the effects of environmental intentions on recycled product preferences as one distinct type of green purchasing preference makes this research unique. In brief, the current study purports the environmentalist predispositions based on BFPT and examines the effects of environmentalist traits (concern, consciousness, norm, pleasure, and belief) on recycled product preferences on an under-researched population and the study is one of the preliminary trials to construct a theoretical framework on environmental-friendly intentions for environmentalist individuals.

This article has four sections, after this introduction, the second section presents the theoretical basis for the environmentalist predispositions, the literature review of recycled product choices, and the hypotheses. The third section is on the method, analyses, and findings of the self-reported data. Finally, the fourth section concludes the study.

Theoretical Background & Hypotheses

Theory of Planned Behavior (TPB) framework supports our research for comprehending the psychological factors towards green purchasing. As recalling the study of Ajzen (1991), the three dimensions of TPB that are attitudes, subjective norms, and perceived behavioral control provide a framework of individuals' conscious behaviors. According to TPB, consumer intention is one of the focal factors in TPB studies, which shows whether the individual is prepared to act in a certain manner or not.

While the literature posits that the intentions are one of the major predictors of human behavior (Kollmuss & Agyeman, 2002), the intention also has a mediator role towards human behavior in TPB studies, for instance, the effects of both attitudes and subjective norms on behavior are only overt with the existence of intention (Kim & Han, 2010).

The literature on green behavior utilizes the framework of TPB, specifically in the field of environmental psychology (Yadav & Pathak, 2016; Stern, 2005). There is evidence of how environmental concern, environmental knowledge, environmental consciousness, and/or perceived consumer effectiveness affect the environmentalist intentions on green purchasing behaviors (Wu & Chen, 2014; Kim & Han, 2010). To examine the intentions of environmentalist individuals, we first presumed the TPB dimensions are certain for environmentalist individuals (Yadav

& Pathak, 2016). Secondly, based on TPB, we interpreted each of BFPT according to the environmentalist individuals.

While conscientiousness is one of the traits of the big five personalities, conscious behavior is also the base of TPB. Thus, the first predisposition that we aim to link with the big five is the environmentalist consciousness. The second one is the environmental concern. It is a critical concept in the minds' of environmentalist individuals, which influences the attitudes. Third, since emotional stability is one of the traits of big five personality traits, and the TPB posits that the outputs of PBC (perceived behavioral control of TPB) change the emotions of individuals either to negative or to positive, environmentalist pleasure, therefore, is an important predisposition of the individuals towards the expected outcomes of their environmental behaviors. Fourth, individuals develop thoughts, emotions, and behaviors towards a psychological object, a person, or an event, but considering the environmentalists' beliefs, while their bases are the attitudes, they originate from the degree of openness to change the environment. Thus, we assumed that the belief towards environmentalist actions or anti-environmentalist actions is an important predisposition of environmentalists by having the openness trait of the BFPT. Finally, the fifth for any environmentalist, norms are important to have a feeling of social acceptance. As the extended TPB includes moral/personal norms in the study of Chen and Tung (2014), social pressures influence the behavior in a certain way. However, the degree of agreeableness shapes environmentalist norms. As a result, based on BFPT with the support of TPB, we aim to incorporate a framework of environmentalist individuals consisting of five predispositions as summarized, which are; (1) environmentalist consciousness, (2) environmentalist concern, (3) environmentalist pleasure, (4) environmentalist belief, and (5) environmentalist norm. Finally, after reaching a framework to examine their associations of environmental-friendly intentions on recycled product preferences, we conducted a self-reported survey. Accordingly, this study not just proposes a new framework but also tests this construct as the dimensionality of environmentalist predispositions.

Recycled Product Preferences

Recycling and consumption of recycled products gain essential social attention (Feng et al., 2017; Trudel et al., 2014). Consumers with environmental awareness depict their concerns on recycling (Hanss & Böhm, 2012) and international organizations start their recycling strategies (Kannan et al., 2016). In the study of Chitra (2007), the author segments Indian consumers in terms of being eco-friendly and evaluates their eagerness to suggest green products to other people. Based on the study of Omran et al. (2017), the respondents have environmental awareness and knowledge of recycling but lack the practice of supporting recycling. Peers' influence and social norms have influences on green purchasing decisions (Khare, 2015; Tsarenko et al., 2013), which brings out a green-purchasing circle

through encouraging others for green products (Tsarenko et al., 2013). Since the literature, rapidly grows with various types of green products, we aim to summarize the distinctions among the environmentally friendly product types of green products, eco-friendly products, recycled products, remanufactured products, and conventional products (Table.1).

Table 1: The distinction between environmental concepts

Expression	Definition	References
Green product	Products designed to reduce the environmental impacts of their design, manufacture, use, and disposal.	(Berchicci & Bodewes, 2005)
Eco-friendly product	Products designed to do the least possible damage to the environment, when they are made or used.	(Campean et al., 2017)
Recycled product	A collection of numerous pieces with multiple past lives. Products having materials, diverted from the solid waste stream including post-consumer materials and materials or generated in industrial processes, or wholly or partially remanufactured.	(Environmental Protection Agency, 2016; Millar, 2018)
Remanufactured product	Products that have been disassembled, cleaned, and-after replacement of any defective parts-reassembled and returned to the market.	(Glavic & Lukman, 2007)
Conventional product	Products that are made entirely of new or virgin materials.	(Hamzaoui & Linton, 2010)

Predispositions towards environmental behaviors

As the environmentalist awareness of individuals increase, the pro-environmental behaviors become apparent (Steg & Vlek, 2009). Thus, their consumption patterns change (Steg et al., 2014) and environmentalists look for alternative ways of consumption such as preferring green products (Kilbourne et al., 2009; Hirsh & Dolderman 2007). Concern about the environment has a significant effect on attitude and perceived behavioral control (Paul et al., 2016). While there is a tendency to pay more for green products or services (Laroche et al., 2001), there is doubt about spending on extras as consumers have doubts related to the functionality of the product and its actual performance (Hanss & Böhm, 2012). Markowitz et al. (2012) examined the mediation of BFPT on environmental behaviors, suggesting that correlates of environmental predispositions are related to

BFPT, but have a distinct effect on behaviors. The topic of consumer attitudes and eagerness to spend on recycled goods is under-researched. Table.2 presents a framework of environmentalist individuals consisting of five predispositions based on BFPT.

Table 2: BFPT and Environmentalist Predispositions

BFPT	**Definition**	**Environmentalist Predispositions**	**Definition**
Conscientiousness	Being organized, achievement-oriented, dependable	*Environmentalist Consciousness*	Being conscious about preferring environmental-friendly products
Extraversion	Level of outgoing, sociable, enjoying social situations	*Environmentalist Concern*	Level of apprehension, concern about the environmental problems
Emotional stability	Being anxious and irritable, or temperamental	*Environmentalist Pleasure*	Having pleasure dealing with environmental-friendly products
Openness	Being curious, open to new ideas, intellectual, and creative	*Environmentalist Belief*	Believing in reducing damage to nature, preferring green products
Agreeableness	Being tolerant, sensitive, trusting, and showing kindness	*Environmentalist Norm*	Valuing the use of environmental-friendly products in a social norm

Previous studies indicate that consumers do not trust the processes that are involved in remanufacturing and they doubt the quality and real value of the product (Smith & Keoleian, 2004; Hazen et al., 2012). As in the study of Suki (2016), changing social values/norms in society have an impact on consumers' green behavior. Jackson (2005) provides a thorough investigation of the literature on change in human and consumer behavior, who has suggestions to leaders to set on more sustainable lifestyles. From another perspective, the effect of PBC on green buying intention states that environmentally concerned consumers are sensitive in their purchasing behaviors by taking into consideration their environment for both today and the next generations. Because they are sure about the benefits of their

green behaviors by evaluating their conscious exertions which have positive impacts on nature and the future (Hanss & Böhm, 2012).

Considering the link between BFPT and environmentalist personality, "BFPT" as the human characteristics that explain the human behavior towards a psychological object is a well-established theoretical construct in the literature (Schmitt et al., 2007). Accordingly, Poskus and Zukauskiene (2017) put forward that the BFPT construct is useful for predicting sustainable consumer behavior towards the recycling attitudes of individuals. However, empirical data on predicting the green purchasing preferences of consumers by the environmental-friendly intentions are not many (Milfont & Sibley, 2012). Naturally, the literature lacks the investigation of the effects of environmentalist predispositions that affect environmental conscious behaviors. Table.2 shows the environmentalist predispositions based on the theory of "big five". In recent studies, scientists have come to an understanding that there are key traits that are linked to environmental behavior that (Brick & Lewis, 2014) refer to as the "Green Personality". Individuals with these traits score high on openness (conceptual thinking, gratefulness for experiences), extraversion (engagement with energy, being social), agreeableness, and emotional stability. However, there is much debate as to whether these personality attributes are a result of nature, nurture, or a mixture of both and to what extent (Wilks & Harris, 2015; Goldhaber, 2012; Parish & Barness, 2009). People whose environmental concern is high are more eager and extroverted, more conscientious (control of oneself, respect for duties, want success), and mature than those who have low concern for nature (Brick & Lewis, 2014; Milfont & Sibley, 2012).

As a result, valuing the use of environmental-friendly products within the social norm, being conscious about preferring environmental-friendly products, having a concern about the environmental problems, having pleasure in dealing with green products, and believing in reducing the harm to the environment by preferring green products are crucial psychological factors for preserving the environment. We conclude our debate with interrelated two hypotheses. The first is to reveal the environmentalist predispositions, and the latter is to examine the associations of environmentalist predispositions on the preferences of recycled products.

H1. Individuals' predispositions towards environmental behaviors have a consistent five-dimensional structure with the Big Five Personality Traits.

H2. The higher an environmental-friendly predisposition is, the higher of a recycled product preference.

Environmental Attitudes in Turkey

The studies in this section show that positive environmental attitudes and awareness of the young generation are growing in this developing economy and

understanding the latent factors of this generations' environmentalist predispositions and their recycled product preferences are very important for future environmental perspectives of society. Based on the studies concerning the environmental attitudes of university students in Turkey, there is a big change in the environmental attitudes and an increase in environmental awareness when they take environmental courses at school (Bal & Karakas, 2018; Basal et al., 2015). However, there are various factors such as the level of education, the financial situation, regulations, and the lifestyle that can influence their environmental perspective (Bal & Karakas, 2018). Based on the study of Onurlubas (2018) in which 384 consumers form the sample who only buy green products, they mention about buying products whose packaging can be recycled and buying as many reusable products as possible. Studying the underlying forces of environment-related behaviors in Turkey is essential. Ural (2018) emphasizes that awareness of resource preservation and protection of the environment has been emerging slowly in Turkey but consumers' low consciousness is an obstacle for Turkey to create an environmentally-conscious society. To the study of Ural (2018) in which 360 households are the sample, findings reveal that more environmental protection works are necessary for Turkey and most of the neighbors and family members think that the respondent should recycle. To the study of Ural et al. (2015) in which 886 students in the south of Turkey form the sample, the emotional responses of Turkish young generation related to green matters are very strong but only having ecological knowledge is not enough for an actual green purchase. Young people with stronger emotions related to green issues have a strong intention to become involved in buying green products. To the study of Celikler et al. (2015) in which 264 university students form the sample in the north of Turkey, the vast majority of respondents have a positive attitude towards the view that using recycled products does not create problems for human health. They are aware of the environmental problems that solid wastes cause and personal effort is necessary to protect future generations. For instance, the study of Akkucuk (2011) emphasizes that besides the availability of recycled products in the Turkish market, the students' purchase intentions and willingness to pay for recycled products differ based on the types of these products if they possess functional and health risks.

Methodology

Sample of the Study

The study uses a quantitative technique to test the hypotheses. In total, 256 volunteer respondents on an under-researched population took place in the study. Street survey method is administered according to the large population at five different university district in Turkey. University districts are one of the populated areas not only full of students but also the service business enterprises and shopping malls. Respondents are asked randomly to be a volunteer to our field research. Because environmental lifestyles are presumed as similar to the other university

districts (Wan et al., 2017; Kashima et al., 2014), we administered a street survey at various university districts. There are no inducements or rewards for participating in the survey, which makes it difficult to collect the necessary data in a short period. For each of the five districts, aptly first 50 volunteers in the most crowded spots such as the university squares, main entrances of universities, and student centers are in consideration for evaluation. The data collection period is between the beginning of February 2018 and May 2018. The sample comprises 59% female, and 41% male, with an average age of 21.3. The responses vary based on the willingness of participants to answer the questions in four categories and the demographic characteristics are in Table.3.

Table 3: Socio-demographic features

Gender	*n (254)*	*%*
Female	150	59
Male	104	41
Age	*n (227)*	
Average age: 21.3		
Family monthly income	*n (220)*	
Lower middle income	114	51.8
Middle income	48	21.8
Upper middle income	36	16.4
High income	22	10.0
Having a job	*n (247)*	
Student	219	88.6
Self-employed	3	1.2
Full-time employee	21	8.5
Retired	4	1.6

Measures

The survey is composed of three parts. The first one is related to demographic questions; gender, education, age, family monthly income, and consideration of self as an environmentalist, while the next part has questions about environmental-friendly intentions. The last part of the survey contains questions about respondents' recycled product preferences. There are 22 research questions (see details in Appendix) for the measurement of variables: four items such as "To stop the environmental collapse, there should be standard measurements in all world countries. Necessary expenditures for environmental sustainability are not waste" for environmentalist concern, four items such as "The preference for environmentally sensitive products is every persons' responsibility. Even one individuals' behavior is important in shaping the future" for environmentalist

consciousness, four items such as "I like visiting stores, which present environmental-friendly products. I follow the trendy and environmentally friendly products online" for environmentalist pleasure, five items such as "I value people who use environmentally friendly products. I feel more conscious about choosing environmentally friendly products" for environmentalist norm, and five items such as "Preference for environmental-friendly products by even one person will clear away environmental problems on a large scale. Explicit reactions against who harm the environment are the responsibility of everyone" for environmentalist belief. The items are adapted from Lee et al. (2015), Hamzaoui, and Linton (2014). Next, six items for recycled product preferences are formed and adapted from Yadav and Pathak (2016), Lai and Cheng (2016). The following items are used for recycled product preferences; "Recycled products are important to me. When a recycled product choice is present, I want to use this choice. My interest is high toward recycled products. I search for recycled products on the shelves when I go shopping. I immediately recognize the recycled products. Recycled products are of top priority when there is a preference". The scales are slightly modified to suit local perceptions about the environmentalist perspectives. In this way, the items become much easier to understand environmental dimensions in the context of Turkish society. The selected items are often used in the literature, which inspired us to form the research questions from recent studies. All scale items are in 5-Point Likert Type Scale such as; 1= Strongly Disagree and 5= Strongly Agree.

Findings

Descriptive Statistics and Measure Purification

We performed Principal Component Analysis (PCA) and Confirmatory Factor Analysis (CFA) to test the theoretical structure of the environmentalist predispositions. The data are analyzed with the Statistical Package for Social Sciences 16.0 and Structural Equation Modelling (EQS) 6.1 statistical programs. We also used the Regression Analysis to examine the joint effects of environmentalists' predispositions on recycled product preferences. We summarized the mean, standard deviation, and Cronbach Alpha values of each construct with the Correlation results in Table.4.

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Table 4: Descriptive Statistics, Cronbach Alpha Scores, and Correlations

Variables	Mean	S.D.	Alpha	Concern	Consciousness	Norm	Pleasure	Belief
Concern	4.08	0.87	0.787	1				
Consciousness	3.03	0.97	0.840	0.280	1			
Norm	3.82	0.91	0.783	0.570	0.520	1		
Pleasure	4.27	0.90	0.843	0.604	0.226	0.589	1	
Belief	3.76	0.88	0.818	0.600	0.489	0.676	0.584	1
Recycled Product Preference	3.52	0.86	0.840	0.524	0.518	0.696	0.517	0.698

Principal Component Analyses

To test the theoretical construct of environmentalist dispositions, we have first conducted principal component analyses (PCA) to test the discrimination of the intentions from each other in a five-factor solution. PCA resulted in a good level of adequacy, the KMO value is 0.914, and the significance level <0.00 for Bartlett's test of sphericity. The measure of sampling adequacy has all the values over 0.7. The solution of five factors represents a 65.93% of the total explained variance, as it is depicted in Table 5. We have submitted each of the five factors on its own to the factor analysis, and we observed that each sub-factor is unidimensional. We have calculated Cronbach Alpha scores to reveal the internal consistency of each measure of the environmentalist predisposition. Each of them has above the score of .70, the exact reliability scores are depicted in Table.5, and along with the respective scores of the each sub-factors' Eigen-value, explained variance, and factor loadings, which supports the first hypothesis (H1) on the consistency of the environmental-friendly intentions have a five-dimensional solution.

Table 5: Items, Explained Variance Percentages, Eigenvalues, and Factor Loadings

Factors and Items	α	Eigenvalue & Explained Variance	1	2	3	4	5
1- Environmentalist Concern (Hamzaoui & Linton, 2014)	**0.787**	**8.708 / 15.639**					
To stop the environmental collapse, there should be standard measurements in all world countries.			**.734**	.239	.070	.085	.147
Necessary expenditures for environmental sustainability are not waste.			**.727**	.202	.021	.210	.000
We should learn from today to put up with additional costs to protect the environment we live in.			**.636**	.087	.016	.109	.384
One of the most essential matters that society encounter today is environmental management.			**.556**	.311	.063	.013	.392
2- Environmentalist Consciousness (Lee et al., 2015)	**0.840**	**2.508 / 13.219**					
The preference for environmentally sensitive products is every persons' responsibility.			.040	**.782**	.057	.120	.067
Even one individuals' behavior is important in shaping the future.			.314	**.738**	.006	.191	.201
One persons' effect on the protection of the environment provides an important contribution to the world.			.312	**.659**	.077	.166	.262
The world becomes much better along with the preference for environmentally friendly products by everyone.			*.428*	**.656**	-.029	.244	.292

3- Environmentalist Pleasure (Lee et al., 2015)	**0.783**	**1.234 / 12.599**					
I like visiting stores, which present environmental-friendly products.			.277	.078	**.802**	.103	.063
I follow the trendy and environmentally friendly products online.			-.181	-.095	**.750**	.229	.167
I am happy to examine the environmentally friendly products at the store window.			*.446*	.110	**.732**	.109	.095
I think that environmentally friendly products affect the trend.			-.085	.081	**.709**	.148	.147
4- Environmentalist Norm (Lee et al., 2015)	**0.843**	**1.051/ 12.301**					
I value people who use environmentally friendly products.			.114	.316	.131	**.739**	.167
I feel more conscious about choosing environmentally friendly products.			*.424*	.219	.156	**.690**	.092
I think that I earn the respect of others when I choose environmentally friendly products.			-.099	.049	.390	**.622**	.133
I am happy while using environmentally friendly products.			*.413*	.315	.264	**.517**	.282
It is important to be environmentally friendly.			*.489*	.323	.127	**.511**	.277
5- Environmentalist Belief (Lee et al., 2015)	**0.818**	**1.004/12.176**					
Preference for environmental-friendly products by even one person will clear away environmental problems on a large scale.			.026	.321	.120	.100	**.709**
Explicit reactions against who harm the environment are the responsibility of everyone.			.211	.391	.098	.105	**.651**

It is not a waste of time to walk around shops where present environmental-friendly products.	.261	.128	.251	.242	**.619**
Everyone should spare extra time to find environmentally friendly products.	.297	-.125	.344	*.408*	**.558**
It is a mission of humankind to control the effect of the product on the environment, before buying it.	.386	.092	.155	*.474*	**.512**

Confirmatory Factor Analyses

We have progressed the Confirmatory Factor Analysis (CFA) to confirm the five-factor solution of environmental-friendly intentions. The ratio of chi-square to degrees of freedom being between one and five shows data and the null model fit each other (Marsh & Hocevar, 1985). CFI shows the suitability of the assumed model and tested the model with each other (Bentler, 1990). RMSEA gives information about observations on whether they are suitable for the model. RMSEA being smaller than 0.08 and CFI that higher than 0.90 show the claimed model is ideal, overall findings illustrate a good result (Hair et al., 2009) on the multi-dimensionality of the environmentalist predispositions as in Table.6.

Table 6: Fit Statistics Report

Fit Index	Findings	Good Fit
X^2 / df	296.318 / 134 = 2.21	X^2 / df < 3
CFI	0.93	CFI ≥ 0.90
RMSEA	0.071	RMSEA < 0.08
(S)RMR	0.068	SRMR < 0.08

Both the results of principal component analyses and confirmatory factor analyses support the first hypothesis (H1) on the multi-dimensionality of the environmental-friendly intentions. Factor analyses yielded in five factors as we expected based on the theoretical background. Each of the factors has produced satisfactory Eigen-vector and provided more than 10 percent variance of the total explained variance.

Multiple Regression Analysis

For testing the second hypothesis, we utilized the correlation scores and regressed the five dimensions together on the recycled product preferences with the multiple regression analysis. Correlation analysis shows that each of the environmental-friendly intentions has ceteris paribus relations to recycled product preferences; however, to examine the joint effects and understand the main

predictors of the environmentalist predispositions on recycled product preferences we used multiple regression analysis. Accordingly, in the results of the regression analysis, the positive and significant one-to-one relations of recycled product preferences with the environmentalist concern and with the environmentalist pleasure disappears as in Table.7. On the other hand, considering the joint effects of environmental-friendly intentions on recycled product preferences, the three of the five environmentalist predispositions are significant, which are environmentalist consciousness, environmentalist norm, and environmentalist belief. These three predispositions are essential, which affect the recycled product preferences, especially of students who form the vast majority of respondents. We summarized the results of the regression analysis in Table.7.

Table 7: The effects of environmentalist predispositions on recycled product preferences

Independents	**Beta**	**t**	**Sig.**
Concern	0.067	1.204	.230
Consciousness	**0.166**	**3.367**	**.001**
Norm	**0.319**	**5.01**	**.000**
Pleasure	0.04	0.69	.491
Belief	**0.338**	**5.475**	**.000**
R^2= .60 / Adj. R^2= .592		F: 73.472	p<.000

Discussion

To reduce and test the large set of our empirical data to the dimensions that we claim within our theoretical-framework on environmental predispositions, first, we used principal component analysis, latter we performed the dimensions with confirmatory factor analysis. When we elaborate on the findings of the PCA concerning the eigenvalue cut point 1.0, the yielded factor structure is consistent with the theory that we claim along with our study. We observed that although we reduce the number of variables with PCA, the remaining set of variables explain sufficient amount of variance within each of the components with a factor loading cut point of .50 as in Table.5. Regarding the assumptions of PCA that each of the variables strongly correlates with each within a component matrix, we tested the theoretical structure with CFA. Accordingly, the results of the CFA on the outputs

of the simple regressions that each of the latent variables within its construct significantly associates with each of the respected observed variables are all significant and the CFA model has satisfactory fit index results as in Table .6.

The analyses support the first hypothesis (H1) on the consistency of the environmental-friendly intentions that have a five-dimensional solution. In the results of the multiple regression analysis, the positive and significant one-to-one relations of recycled product preferences with the environmentalist concern and the pleasure fade away. But considering the joint effects of environmentalist predispositions on recycled product preferences, the predispositions of consciousness, norm, and belief are significant, which supports the second hypothesis (H2). Based on the findings, TPB partially supports the purchase of recycled products in the researched context, which is the opposite of the findings of Wan et al. (2012) in which the TPB construct affects the students' intention to recycle. In the context of Turkey, despite the availability of recycled products in the market, not only environmental-friendly intentions are essential but also the type of recycled products and willingness to purchase those products that create no health problems and functional risks (Akkucuk, 2011). It is critical to understand the environmentally-oriented behavior of consumers, which can help to link the environmentalist predispositions and distinguish who has an environmental orientation or not and to what extent.

Focusing on the concern for the environment, the level of consciousness of respondents and the preference for environmental-friendly products, valuing these type of products considering the social norm, having pleasure dealing with these products, and believing in making a positive impact on nature can give hints about the recycled product preferences in this developing economy. Although there can be a discussion about whether this "five-ness" symbolizes the environmental-friendly predisposition, intention, or personality, there are many other personality inventories with a different number of factors such as the MBTI. The other traits such as honesty-humility or emotionality from the HEXACO model or constructs such as identification with nature or politicized environmental identity that is studied in the study of Schmitt et al. (2019) can be potentially essential for recycled product preferences. The HEXACO model has six dimensions; Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience (De Vries et al., 2009) that are slightly different than the dimensions of BFPT (Markowitz et al., 2012). These dimensions can also be studied to understand environmentalist predispositions and consumer behavior on recycled product preferences from different perspectives. In this way, the decision-makers can have different tools for strategic environmental decisions and Liu et al. (2017) mention the essentiality of environmental practices in the organizations, whether they understand the environmentally-oriented behavior of society. The other environmental issue is the ability to manage scarce resources not only for the

organizations but also for consumers (Heyes & Kapur, 2012). The question is how much of these managerial and environmental actions satisfy the needs of the young generations and others, especially for the preference of recycled products.

Conclusions

This research is mainly based on the TPB framework and adapted from the personality traits of big five revealed the psychological antecedents of recycled product preferences through environmental-friendly intentions. This study enhances the understanding of the effects of environmentalist predispositions on recycled product preferences. The study is one of the early trials to comprehend the effect of environmental-friendly intentions on recycled product preferences in the Turkish context. The study used TPB for examining the consumer's purchasing intentions towards green products, in specific toward the recycled products in this developing economy. The main results suggest strongly that the consumers' environmentalist consciousness, environmentalist norm, and environmentalist belief affect recycled product preferences. In other words, the consumers' consciousness of preferring environmental-friendly products, knowing the importance of using these products, and having the responsibility of preserving the environment have a significant effect on recycled product choices. Contrary to the study of Ramayah et al. (2010), in this study, a positive attitude toward nature correlates strongly with green buying. As a weakness of this strong correlation, the study is mainly based on students' environmental perceptions with low income.

With the rising number of environmentalists who are looking for green activities, green organizations can construct a base for their marketing agenda and environmental applications can help to position differently and competitively (Groening et al., 2018). From the organizational perspective, evaluating the environmentalist predispositions of individuals and examining their relations on the consumption preferences of recycled products, may not only help to understand the individuals' purchasing tendencies but also let the organizations improve their product and service quality according to the needs and preferences of environmentalist consumers. The strong correlation between the positive attitude towards green buying and nature can promote a "business as usual" outlook in this developing economy.

The study comes with limitations. The study specifically focuses on the environmentalist dimensions and their effects on recycled product choices. The data of the study is from a street survey. Thus, most of the respondents are more social and conscientious who could respond to the survey. Further study can be conducted through an e-survey to reach a higher population. Future studies can examine TPB related to recycled product categories. Larger sample sizes from developed economies can provide different findings. A comparison of green purchase behavior

between the European Union and the United States can be analyzed. Future research can pay attention to selecting participants from regions where consciousness is low in understanding the impacts of recycling preferences. Green purchasing behavior and non-green purchasing behavior can be compared according to their intentions towards the recycled product preferences as well.

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Appendix

Research Questions

Environmentalist Concern
1. To stop the environmental collapse, there should be standard measurements in all world countries.
2. Necessary expenditures for environmental sustainability are not waste.
3. We should learn from today to put up with additional costs to protect the environment we live in.
4. One of the most essential matters that society encounter today is environmental management.
Environmentalist Consciousness
5. The preference for environmentally sensitive products is every persons' responsibility.
6. Even one individuals' behavior is important in shaping the future.
7. One persons' effect on the protection of the environment provides an important contribution to the world.
8. The world becomes much better along with the preference for environmentally friendly products by everyone.
Environmentalist Pleasure
9. I like visiting stores, which present environmental-friendly products.
10. I follow the trendy and environmentally friendly products online.
11. I am happy to examine the environmentally friendly products at the store window.
12. I think that environmentally friendly products affect the trend.
Environmentalist Norm
13. I value people who use environmental-friendly products.
14. I feel more conscious about choosing environmentally friendly products.
15. I think that I earn the respect of others when I choose environmentally friendly products.
16. I am happy while using environmentally friendly products.
17. Being environmentally friendly is important to me.
Environmentalist Belief
18. Preference for environmentally friendly products by even one individual will clear away environmental problems on a large scale.
19. Explicit reactions against those who harm the environment are the responsibility of everyone.
20. It is not a waste of time to walk around shops where present environmental-friendly products.
21. Everyone should spare extra time to find environmentally friendly products.
22. It is a mission of humankind to control the effect of the product on the environment, before purchasing it.
Recycled Product Preferences
23. Recycled products are important to me.
24. I immediately recognize the recycled products.
25. When a recycled product choice is present, I want to use this choice.
26. My interest is high toward recycled products.
27. I search for recycled products on the shelves when I go shopping.
28. Recycled products are of top priority when there is a preference.
Demographic Characteristics
29. What is your gender?
30. What is your age?
31. What is your job?
32. What is your family's monthly income? Lower middle income, Middle income, Upper middle income, or High income?