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## Green purchase intention of young Turkish consumers: Effects of consumer's guilt, self-monitoring and perceived consumer effectiveness

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### Abstract

This research introduces the results from a quantitative study of young Turkish consumers regarding how the consumer guilt, self-monitoring and perceived consumer effectiveness influence their green consumption intention. The purpose of this research was to provide an empirical study to explain the direct and indirect effects of three special factors on the green consumption; as well as the first two factors' impact on the perceived consumer effectiveness. In this context, a conceptual model has been proposed and subjected to empirical verification with the use of a survey data collected from 172 university students. The study revealed that perceived consumer effectiveness is the most influential construct on green purchase intention. Consumer guilt has been found to have both direct and indirect enhancing effects on green purchase intention of young consumers. While more empirical research is required to test the long term engagement of the young consumers, the future research would be focused on the daily green consumption habits of consumers.

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*Keywords:* Green Consumption, Perceived Consumer Effectiveness (PCE), Self-Monitoring, Consumer Guilt

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### 1. Introduction

Growing consumer sensitivity to social and environmental problems and its great pressure on marketers and public policy makers are addressed even by works in 1970s (e.g. Kassarijian, 1971; Anderson & Cunningham, 1972; Kinnear, James, & Sadrudin, 1974). Consumers' belief in that their personal consumption decisions can help maintain the environment or induce its deterioration and consequently improve quality of life in society change the way many goods and services are marketed (Kinnear, James, & Sadrudin, 1974; Brooker, 1976). Moreover, marketing and consumer behavior researchers also focus on understanding the dynamics of the consumption described as socially conscious, sustainable, pro-environmental or green. During the last four decades, the consideration over green

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consumption has been enlarged by the contributions of the academics from different scientific disciplines who intended to discover the antecedents of sustainable consumption (Prothero, Dobscha, Freund, Kilbourne, Luchs, Ozanne, & Thøgersen, 2011).

While early works (e.g. Anderson & Cunningham, 1972; Webster, 1975) mainly focus on identifying the characteristics of socially conscious consumers more recent works have centered on the identification of consumer motivation underlying pro-environmental behaviors and the explication of the relationship between cognitive or motivational factors and environmentally conscious behavior (Kim & Choi, 2005). Nevertheless, as reported by Prothero, Dobscha, Freund, Kilbourne, Luchs, Ozanne, & Thøgersen (2011), the problems related to unsustainable consumption are growing, despite all the work in academia addressing the need of additional research.

In this context, this research focuses on understanding the “green consumption” which is a subset of sustainable consumption and refers to willingness to buy ecologically friendly products or services (whose contents and methods of production) have least damage to the environment (Young, Hwang, McDonald, & Oates, 2010). Through an individualistic perspective centering the needs, values and attitudes, the research focuses on the process through which intention for green consumption is significantly explained. For this purpose, the roles of personal states (consumer guilt and perceived effectiveness), personal traits (self-monitoring) in the process leading to green purchase intentions are investigated. The study begins with describing the green consumption and giving literary background of the proposed direct and indirect effects of the personal factors on green purchase intention. Next, the research model is tested; the results are reported and discussed. Finally, suggestions for implications and future research are provided.

## 2. Literature Review And Hypotheses

The environment-related behavioral terms have been used with different terms stating the behavior that has a positive impact on the environment: Ecologically concerned consumption, environmentally conscious behavior, environmental activism, pro-environmental behavior, sustainable consumption behavior and green consumption behavior (Kinnear, James, & Sadrudin, 1974; Roberts, 1996; Antonetti & Maklan, 2014; Lee, Kim, Kim & Choi, 2014). The green purchase intention-willingness to consume with the minimal damage to the environment- dates back to early 1970s (e.g. Anderson and Cunningham, 1972, Kinnear, James, & Sadrudin, 1974, Brooker 1976). In an attempt to explain green consumption behavior some group of works focused on determining the characteristics of so-called “green consumer”, (Kinnear, James, & Sadrudin, 1974; Webster, 1975; Roberts, 1996; Laroche, Bergeron & Barbaio-Forleo, 2001; Lu, Chang & Chang., 2015) while another groups of work mainly concentrate on the consumers’ environmental knowledge, concern and environmental attitude and environmental consciousness (Roberts, 1996; Minton & Rose, 1997; Roberts & Bacon, 1997; Laroche, Bergeron & Barbaio-Forleo, 2001; Diamantopoulos, Schelegelmilch, Sinkovics & Bohlen, 2003; Lu, Chang & Chang, 2015) as main drivers of green purchasing. The personal values (e.g. perceived importance; perceived inconvenience; individualism/ collectivism, conspicuous consumption) the personal and social norms were also studied to explain the green consumer behavior (Roberts, 1996; Roberts & Bacon, 1997; Chan, 2001; Goldstein, Cialdini & Griskevicius, 2008; Griskevicius, Tyburg & Van den Bergh, 2010). External influences such as the role of price and quality, eco-labels and consumers’ beliefs about the environmental performance were also investigated as related with the green consumption as reported by Sima (2014).

Unlike the previous works on green consumption, this research focuses on both effects of state of guilt and self-monitoring trait on green purchase intention directly and indirectly through promoting perceived consumer effectiveness. Consistent with the previous findings regarding very strong relationship between constructs (Kinnear, James, & Sadrudin, 1974; Roberts, 1996) perceived consumer effectiveness is considered as a key antecedent of green purchase intention.

### 2.1. Perceived Consumer Effectiveness

Perceived Consumer Effectiveness (PCE), is a concept that dates back to 1970s, described as the ability to affect outcomes captures the stable beliefs about the effectiveness of consumer choices in general (Kinnear, James, & Sadrudin, 1974; Ellen, Weiner, & Cobb-Walgren 1991; Roberts, 1996; Kim & Choi, 2005; Vermeir & Verbeke, 2006;

Wesley, Lee & Kim, 2012). PCE refers to the level of consumers' belief that their individual actions make a difference in solving a problem and it is defined as the self-assessment within the context of the issue (Berger & Corbin, 1992). High PCE is essential to remind consumers to convert their positive attitudes into actual purchase (Ellen, Weiner & Cobb-Walgreen, 1991; Berger & Corbin, 1992; Roberts, 1996; Vermeir & Verbeke, 2006). In other words, people with positive attitude for green consumption have a tendency to support green consumption behaviors more when they believe that they can make contribution to solving the environmental problem (Vermeir & Verbeke, 2006; Cho, Thyroff, Rapert, Park & Lee, 2013; Lee, Kim & Choi, 2014).

Perceived consumer effectiveness is closely related to the concept of perceived behavioral control taking place within Theory of Planned Behavior (TPB) (Ajzen, 1991) and is very popular in investigating green consumer behavior. According to TPB, an individual's intention to behave in a certain way can be explicated by his/her attitudes towards behavior, perceptions about social pressure and perceptions about the difficulty of the behavior (i.e. perceived behavioral control) in a causal order (Ajzen & Fishbein, 1980). Perceived behavioral control refers to people's perception of the ease or difficulty of performing the behavior of interest (Ajzen, 1991). Recently, behavioral control, attitudes and subjective (or social) norms were found to be valid constructs for predicting environmentally sustainable consumer behavior (e.g. Vermeir & Verbeke, 2008). Similarly, because people's behavior is strongly influenced by their confidence in their ability to perform it (Ajzen, 1991) we suggest that PCE has a positive effect on green purchase intention.

**H5:** The perceived consumer effectiveness influences positively on future intentions to engage in green consumption.

As a key variable in the process leading the green purchase intention, we also proposed that consumer effectiveness partially mediates the effects of some other personal factors on green consumption. In pro-environmental literature, PCE is supposed to be a function of how consumers believe in their capability to contribute to and influence positively the environment (Kim & Choi, 2005; Cho, Thyroff, Rapert, Park & Lee, 2013). Antonetti & Maklan (2014) show that the individual experiences of post-consumption guilt and pride lead to an increase in PCE within the sustainable consumption context. However, there are still very few researches examining the individualist variables promoting PCE and its relation with sustainable consumption intention. Depending on the arguments discussed in the following sections, we suggest that consumer perceived effectiveness is enhanced by the effects of consumption guilt and a special personality trait, self-monitoring.

## 2.2. *Self-Monitoring*

Self-monitoring is a social psychological construct based on self-observation and self-control to recognize the related signals for socially appropriate behaviors in a given situation (Snyder, 1974). The self-monitoring person is the one who, because of his concern for social appropriateness, is notably sensitive to the expression and self-presentation of other persons in a social context and uses these signals as references for monitoring his own self-presentation (Snyder, 1974; Snyder & Gangestad, 1986; DeBono, 2006). In this regard, the individuals can be classified as "high self-monitors" who may be highly responsive to social and interpersonal signals of conditionally correct behavior; or on the contrary, as "low-monitors" who do not engage in expressive control, without the same concern for the contextual appropriateness of their expressive behavior. The low self-monitors' expressive behaviors are not controlled by cautious efforts to appear situationally appropriate; instead, these behaviors reflect their own intrapersonal or inner attitudes, emotions, and moods (Kavak, Gürel, Eryiğit & Tektaş, 2009; Gangestad & Snyder, 2000; Snyder, 1974). Consequently, within the significant self-monitoring approach, we can resume that interpersonal signals are more definitive than the intrapersonal signals.

Based on the literature on charitable giving and green purchase intention, Hartmann & Apaolaza-Ibanez (2012) demonstrate that when social appraisal is significant, individuals' self-expression becomes conclusive in the process to consume in a pro-environmental and pro-social way. Correspondingly, we propose that self-monitoring; as a person's self-expression in line with the norms of social appropriateness concerning her/his green consumption; has a direct positive influence on green purchase intention:

**H2:** The self-monitoring leads to future intentions to engage in green consumption.

Flynn, Reagans, Amanatullah & Ames (2006) found that self-monitoring was strictly linked to the exactitude with which people perceived others’ exchange relations and as a personality trait, self-monitoring would have an important role in perceiving and handling the status dynamics of exchange relations. Based on this significant role of self-monitoring in perceived exchange relations, we suggest that self-monitoring would have a positive influence over perceived consumer effectiveness in the green consumption context:

**H4:** The self-monitoring influences perceived consumer effectiveness positively.

2.3. Consumer Guilt

Guilt, with both affective side, describing an individual state or emotion and a cognitive side describing a character trait, is a multidimensional psychological concept (Lascu, 1991). As a personality trait, the guilt has been defined as a “common expectation for self-mediated punishment for violating, anticipating violating, or failing to reach an internalized moral standard” (Lascu, 1991). From the emotional perspective, guilt is described as a “negative state that an individual experiences in reaction to either positive but undeserved event or a negative but deserved event” (Roseman, 1984 ; Dahl, Honea & Manchanda, 2005). In the marketing literature, the state of guilt has been more effective / helpful to distinguish the violation of personal or social ethical beliefs guilt as it eventually pushes consumers toward prosocial behavior (Burnett & Lunsford, 1994; Dahl & Honea, 2005; Pelozo, White & Shang, 2013). Based on the psychology literature of guilt, Huhmann & Brotherton (1997) have classified main forms of advertiser that would generate different forms of guilt: *anticipated guilt, reactive guilt and existential guilt*. Anticipated guilt upsurges from envisaging a violation of one’s own standards; reactive guilt is a reaction to having violated one’s standards of suitable behavior and existential guilt is experienced as a consequence of inconsistency between well-being of one person and of others (Cotte, Coulter & Moore, 2005).

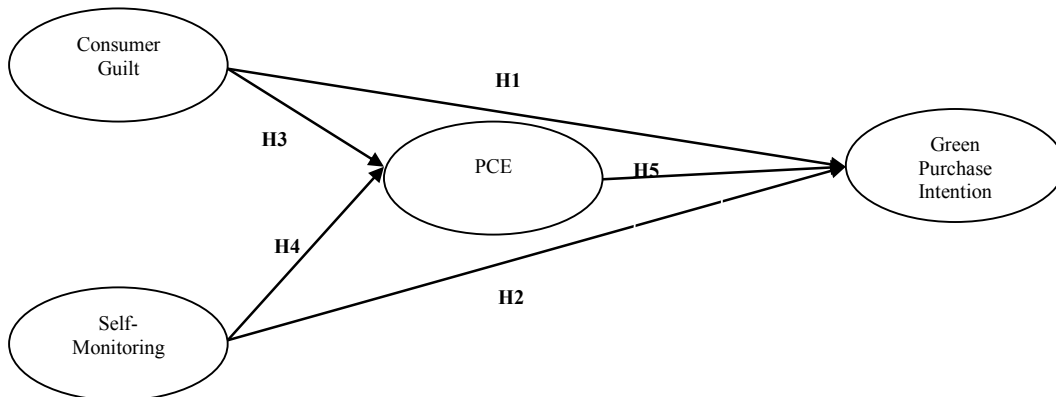
Environmental protection is a widely recognized moral standard, hence, when an individual challenges his perceived environmental responsibility without respecting his moral standard, the anticipated guilt is expected to occur (Basil, Ridgway & Basil, 2006; Pelozo, White & Shang, 2013, Theotokis & Manganari, 2014). Consequently, the high probability of anticipated guilt concerning the environment would influence positively a consumer’s pro-environmental behavior and hence his green consumption intention:

**H1:** The consumer guilt will lead to future intentions to engage in sustainable consumption

As Lascu (1991), Cotte (2005) and Antonetti & Maklan (2014) propose, whenever an individual feels able and ready to take the actions required decreasing guilt, she/he will probably be further focused and motivated to do so. Concentrated on the emotional experience from the past sustainable consumption choice, Antonetti and Maklan (2014) showed that guilt and pride trigger a learning procedure that leads to an increase in PCE within the green consumption context. Hence, we suggest that there would be a positive relation with consumer guilt and PCE:

**H3:** The consumer guilt influences perceived consumer effectiveness positively.

Figure 1. Research model



### 3. Methodology

#### 3.1. Research Goal

The main objective of this study is to explain the direct effects of consumer guilt, self-monitoring and perceived consumer effectiveness on green consumption intention. In addition, the direct effects of self-monitoring and consumer guilt over the perceived consumer effectiveness have been analyzed.

#### 3.2. Sample and Data Collection

The data was collected through a survey conducted on graduate and undergraduate students from a university, located in Kocaeli. The questionnaire contained 14 questions which were pretested and revised to clarify the meaning and remove all ambiguity. Before delivering the questionnaire, participants were acquainted with “Earth Hour” application and they were asked to indicate if they did attend the “Earth Hour” campaign in the past years. Convenience sampling technique was used to select the participants. Consequentially, after a week of data collection period 178 respondents were emerged with a response rate of approximately 90%. The demographic characteristics of the sample are presented in Table 1.

Respondents consisted of 61,8% female and 38,2% male. In terms of age, 57,3% of the respondents were between 18-24 years old. Moreover the majority of the respondents (41,6%) had less than 300-1000€ monthly income. All of the respondents reported that they did not attend the “Earth Hour” campaign in the past years. The demographic characteristics of the sample are presented in Table 1.

#### 3.3. Measures

Constructs in the research model were measured using five-point Likert type multi-item scales (1=strongly disagree and 5=strongly agree). Consumer guilt was measured using the three items adapted from the scale of Theotokis & Manganari (2014). Similarly, four items for the measurement of self-monitoring was adapted from the scale used by Lennox, Richard & Raymond (1984). Four items used for the measurement of perceived consumer effectiveness adapted from various scales. First two items of the scale were adapted from the scale employed by Lee, Kim & Choi (2014); third item was adapted from the scale used by Wesley, Lee & Kim (2012) and last item was adapted from the work of Theotokis & Manganari (2014). Green purchase intention was measured using three items following the work of Lu et al., 2015. Measurement items are provided in Table 2.

Table 1. Demographic characteristics of sample (n=178)

CHARACTERISTICS		N	%
Gender	Female	110	61,8
	Male	68	38,2
Age	18-24	102	57,3
	More than 24	76	42,7
Educational level	Undergraduate	159	89,3
	Graduate	19	10,7
Monthly income	Less than 300 €	20	11,2
	300-1000 €	71	41,6
	1000-2000 €	60	32,0
	More than 2000 €	27	15,2

### 4. Analyses and Results

Following the two-step approach (Anderson & Gerbing, 1988) in structural equation modelling, measurement model was tested initially through a confirmatory factor analysis and then structural model was tested to assess the hypothesized relationships.

#### 4.1. Measure assessments

The measurement model including the multi-item scales of consumer guilt, self-monitoring, perceived consumer effectiveness and green purchase intention was tested through confirmatory factor analysis by using the maximum likelihood estimation technique. Model was found to fit the data well since the fit statistics were reported as  $\chi^2(71)=119,19$ ;  $p<0.01$   $\chi^2/df=1.68$ ; CFI=0.95; GFI=0.92; TLI=0.94; NFI=0.910; IFI=0.96 RMSEA=0.06. Measurement items, factor loadings, Cronbach's alpha coefficients, composite reliability scores and average variance extracted scores are provided in Table2. Accordingly, composite reliability (CR) scores range from 0.78 to 0.89, and Cronbach's alpha coefficients range from 0.77 to 0.89, all indicating that constructs are highly reliable (Fornell & Larcker, 1981; Nunally, 1978). As presented by Table 2 all factor loadings are large and significant ( $p<0.01$ ) which is a signal of convergent validity. Also average variance extracted scores (AVE) which ranges from 0.50 to 0.73 provide additional evidence regarding convergent validity (Fornell & Larcker, 1981). Discriminant validity of the measures are evaluated by comparing AVE of each construct is with their squared inter-construct correlation coefficients presented in Table3. The relatively higher AVE values provided evidence regarding the discriminant validity of the constructs (Fornell & Larcker, 1981).

Table 2. Factor Loadings, Cronbach's Alpha, CR and AVE Scores.

CONSTRUCT	Standardized estimates	Cronbach's Alpha	CR	AVE
Consumer Guilt		.89	.89	.73
I feel irresponsible if I don't participate in Earth Hour Program	.81			
I feel guilty if I don't participate in Earth Hour Program	.86			
I feel accountable about not helping to protect the environment	.89			
Self-Monitoring		.78	.79	.50
I have found that I can adjust my behavior to meet the requirement of any situation I find myself in	.53			
In social situations, I have the ability to alter my behavior if I feel that something else is called for	.89			
Once I know what the situation calls for, it's easy for me to regulate my actions accordingly	.69			
I have the ability to control the way I come across to people, depending on the impression I wish to give them	.67			
Perceived Consumer Effectiveness		.84	.84	.56
I feel I can help solve natural resource problem by conserving water and energy	.65			
Through my personal choices I can contribute to the solution of environmental issues	.80			
I am concerned about the environment	.81			
What I purchase as a consumer has an effect on the nation's environmental problems	.73			
Green Purchase Intention		.77	.78	.53
When I have a choice between two equal products, I purchase the one less harmful to other people and the environment	.72			
I have switched products for ecological reasons	.76			
I make a special effort to buy paper and plastic products that are made from recycled materials	.71			

Note: CR: composite construct reliability. AVE: Average variance extracted

Table 3 presents the descriptive statistics of and intercorrelations between the four constructs in the study. All correlations were found to be significant and in the expected direction, except the intercorrelation between self-monitoring and green purchase intention which was found to be insignificant.

Table 3. Descriptive Statistics and Correlations estimates

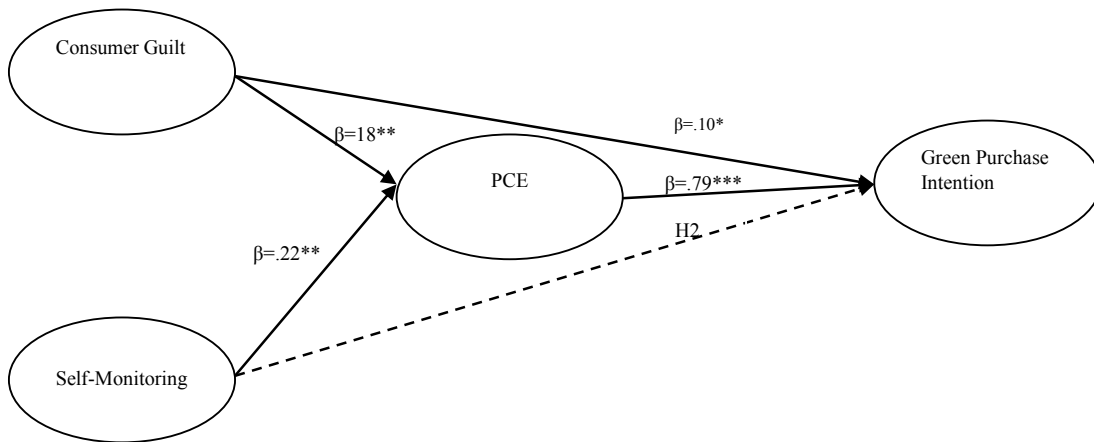
	Mean	Std. Deviation	1	2	3	4
1- Consumer Guilt	3.04	1.11	1.00			
2- Self Monitoring	3.64	0.88	.23(**)	1.00		
3-Perceived Consumer Effectiveness	3.95	0.84	.29(**)	.22(**)	1.00	
4- Green Purchase Intention	3.28	0.93	.30(**)	.08	.57(**)	1.00

Note: \*\*Correlation is significant at  $p < 0.001$ (2-tailed).

#### 4.2. Hypothesis Testing

To test the hypotheses the structural model was tested using maximum likelihood estimation technique. Fit statistics ( $\chi^2_{(72)} = 126,33$ ,  $\chi^2 / df = 1.41$ ; RMSEA=0.07; CFI=0.95; GFI=0.91; TLI=0.94; NFI=0.91; IFI=0.95) revealed that the model fits well to the observed data. Figure 2 presents the research model with estimated path coefficients for the hypothesized relationships. Accordingly, three out of five of the hypothesized effects were supported and 55% of the variance in green purchase intention was explained through the model.

Figure 2. Structural model with parameter estimates  
Note: Parameter estimates \* $p < 0.05$  \*\*  $p < 0.01$  \*\*\* $p < 0.001$



Concerning the analysis results regarding hypothesized effects, H1, which proposes a positive effect of consumer guilt on green consumption intention is supported ( $\beta = .10$ , Standardized Estimates=.10;  $t = 1.71$ ;  $p < .05$ ). The result shows that when consumers feel accountable about not helping to protect the environment, they are more likely to buy paper and plastic products that are less harmful to other people and the environment. However, H2, which suggests that the self-monitoring encourage intentions to engage in green consumption is not supported. The reason of this can be low sampling size and manner of application of questionnaire.

Concerning positive effects of feeling guilt and self-monitoring on perceived consumer effectiveness; H3 ( $\beta = .18$ ;  $t = 3.1$ ;  $p < .01$ ) and H4 ( $\beta = .22$ ;  $t = 2.57$ ;  $p < .01$ ) are supported. Accordingly, consumers feeling guilt more intensively are more likely to perceive themselves more effective on the solutions to the environmental issues. Moreover, consumers' sensitivity and control feeling about the impression over people also encourage their perceived power to solve environmental problems.

Finally, H5 which proposed increasing effect of the perceived consumer effectiveness on intentions to engage in green consumption is supported ( $\beta = .79$ ;  $t = 6.12$ ;  $p < .001$ ). When consumers believe that their consumption has a



significant effect on the nation’s environmental problems they to buy less harmful products to other people and the environment.

Table 4. Structural parameter estimates

Hypothesized path	Standartized estimates	t-value	Results
H1: Consumer Guilt → Green Purchase Intention	.10	1.71*	Supported
H2: Self-Monitoring → Green Purchase Intention	-.12	-1.38	Not Supported
H3: Consumer Guilt → Perceived Consumer Effectiveness	.18	3.1**	Supported
H4: Self-Monitoring → Perceived Consumer Effectiveness	.22	2.57**	Supported
H5: Perceived Consumer Effectiveness → Green Purchase Intention	.79	6.12***	Supported

Note:  $\chi^2_{(72)} = 126,33$ ,  $\chi^2 / df = 1.41$ ; RMSEA=0.07; CFI=0.95; GFI=0.91; TLI=0.94; NFI=0.91; IFI=0.95 \*p<0.05 \*\* p<0.01 \*\*\*p<0.001

Direct, indirect and total effects of the constructs on each other can be evaluated through structural equation modeling. Based on this point, direct and indirect partial influences of self-monitoring and guilt on green purchase intention are discussed. The results are presented in Table 5. The findings demonstrate that self-monitoring has not had a significant effect on green purchase intention. But the construct of guilt has direct and indirect impact on green purchase intention. The indirect effects of constructs clearly expose that guilt produce more favorable green purchase intention through perceived consumer effectiveness. It means that perceived consumer effectiveness is partially mediating the relationship between guilt and green purchase intention. Additionally; the square multiple correlations show that a very considerable portion of variance in green purchase intention is explained by the depicted relationships (%55).

Table 5. Direct and Indirect Effects

	Self-monitoring	Guilt	Effectiveness
TOTAL EFFECT			
Effectiveness	.23**	.27**	-
Green Purchase	.05	.32*	.71***
DIRECT EFFECT			
Effectiveness	.23**	.27**	-
Green Purchase	-.11	.13*	.71***
INDIRECT EFFECT			
Green Purchase	.16	.19**	-

Note: \*p<0.05 \*\* p<0.01 \*\*\*p<0.001

**5. Conclusion**

The purpose of this research was to investigate the direct effects of consumer guilt state-the intrapersonal independent variable-; self-monitoring-the interpersonal independent variable- and perceived consumer effectiveness on green purchase intention within the context of an NGO’s global pro-environmental behavior campaign (Earth Hour). Furthermore, it examines the indirect effects of consumer guilt state and self-monitoring trait on green purchase intention through perceived consumer effectiveness.

This research contributes on the sustainable consumption literature by systematically reviewing the effect of two independent variables (PCE and consumer guilt) on consumers’ green purchase intention. Firstly, data analyses showed that perceived consumer effectiveness (PCE) is an important antecedent of a consumer’s green purchase



intention. This result is consistent with the findings of previous studies in the relevant literature that underline the important relationship between PCE and a consumer's environmental behavior (Kim & Choi, 2005; Vermeir & Verbeke, 2006; Cho, Thyroff, Rapert, Park & Lee, 2013; Antonetti & Maklan, 2014; Lee, Kim & Choi, 2014). Additionally, the results demonstrate that the consumer guilt is also a significant predictor to the consumer's green purchase intention as it has been exposed in the recent literature (Basil, Ridgway & Basil, 2006; Peloza, White & Shang 2013; Theotokis & Manganari, 2014).

Meanwhile, self-monitoring's direct impact on green consumption is found to be insignificant. This result might be caused from the fact that the Earth Hour Campaign was not a locally known environmental campaign and accordingly, the social appropriateness criterion of self-monitoring has probably not been dominant for the respondents.

Marketers involved in green consumption should recognize the significance of PCE for a consumer, and hence, they should emphasize the positive contribution of pro-environmental behavior through the information and emotions delivered by different channels. Green marketers can increase PCE through providing a specific consumer group with specific examples that show that their behavior can effectively make a difference (e.g. Earth Hour website). The Anticipated guilt state is also a significant driver to increase an individual's involvement to green consumption like the guilt appeals used in social marketing.

This research has some limitations. This research might be reproduced with the use of an extra contextual independent variable, e.g. competitive altruism that would support the relationship between self-monitoring and green purchase intention by increasing the importance of social appraisal, the interpersonal criteria. Additionally, time and effort efficiency would increase the attractiveness of a future green purchase intention model that would easily enter into the daily life of the consumers via the "simple choice heuristic" as proposed by Thøgersen et al. (2012).

By beginning from the "opt-in" in a pro-environmental campaign, where the individual involvement is essential, as a pathway to review an anticipated guilt, this research offers a path to empirically test the guilt impact accompanied with the effectiveness feeling to the green consumption intention of young consumers. Future research could determine the long term pro-environmental engagement of young consumers along with the different segments of green consumers via quantitative and qualitative methods.

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