

Understanding green purchase intention among college students: an examination of collectivism, environmental attitudes, perceived consumer effectiveness, and spirituality

Comprendiendo la intención de compra verde entre los estudiantes universitarios: un examen del colectivismo, las actitudes ambientales, la efectividad percibida del consumidor y la espiritualidad

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Abstract

This study proposed and subjected to empirical verification with the use of survey data collected from 100 university students. The ordered logit model revealed that gender and perceived consumer effectiveness play an important role in green purchase intention. Women are more likely to have a positive attitude towards green products. Also, as perceived consumer effectiveness increases there is a greater possibility to engage in pro-environmental behavior. Findings offer implications for marketing managers and public policymakers and reveal fruitful avenues for future research.

key words: green purchase intention, gender, perceived consumer effectiveness

Resumen

Este estudio propone y somete a verificación empírica con el uso de datos de cuestionarios recopilados de 100 estudiantes universitarios. El modelo logit ordenado reveló que el género y la eficiencia percibida del consumidor juegan un papel importante en la intención de compra verde. Es más probable que las mujeres tengan una actitud positiva hacia los productos ecológicos. Además, a medida que aumenta la eficiencia percibida del consumidor, hay una mayor posibilidad de participar en un comportamiento pro-ambiental. Los hallazgos ofrecen implicaciones para los gerentes de marketing y los encargados de formular políticas públicas y revelan vías fructíferas para futuras investigaciones.

Palabras clave: intención de compra verde, género, eficiencia percibida del consumidor

1. Introduction

Unsustainable global development and consumption had led to negative impacts on the environment such as climate change, water, air, and land pollution, and waste generation. These sustainability issues are forcing society to modify their consumption patterns and behaviors towards environmental sustainability (Jaiswal & Kant, 2018). Environmental problems have drawn much attention from the public and scholars. Moreover, business managers have developed strategies to support green attitudes and consumption (Wang, Ma, & Bai,

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2019). Environmental problems are increasing and represent a real socio-economic threat to developed and developing countries (Remoundou & Koundouri, 2009). However, it has been argued that the environmental issues are more harmful in developing countries due to their instability and absence of capacity to effectively react to post-catastrophe circumstances (Im, Pal, & Eltahir, 2017). According to the Commission of the European Communities (2001), green products are those that use fewer resources, have lower environmental impact and risk, and prevent waste generation at the conception stage.

Considering that universities shape generations to practice valuable roles effectively (Frank & Meyer, 2007), hence college students can be seen as potential leaders (Lozano, Lukman, Lozano, Huisingh, & Lambrechts, 2013; Zilahy & Huisingh, 2009). Although they are not the only ones that can attain knowledge and top-grade positions but are more likely to obtain the knowledge needed to accomplish significant decisions and solutions for a more sustainable world. Therefore, it is relevant to consider what factors lead them to have an environmental intention, so that effective social, commercial and political pro-environmental strategies can be enhanced (Vicente-Molina, Fernández-Sainz, & Izagirre-Olaizola, 2018).

Although the literature has shown that young consumers have high intentions to purchase green products (Chekima, Chekima, Syed Khalid Wafa, Igaua, & Sondoh, 2016; Yadav & Pathak, 2017), it has also been emphasized the lack of studies on what and how to encourage green purchase behavior (Ritter, Borchardt, Vaccaro, Pereira, & Almeida, 2015).

Applying customer-dominant logic this study focused on collectivism, environmental attitudes, perceived consumer effectiveness (PCE), spirituality and gender (Cheung & To, 2019; Heinonen & Strandvik, 2015; Kim & Choi, 2005). These variables were chosen since the need to understand the discrepancy between the strong importance that people give to the environment and the scarce actions taken by them to confront environmental issues. To transform the society's environmental preoccupations on to strong and continuous actions that preserve the environment and achieve sustainable development we need to comprehend what is underneath their thought of the environment (Cheung & To, 2016).

This article is organized as follows. First, some key articles from the behavioral psychology literature on the dependent variables and green purchase intention are reviewed. Then our methodology is presented and a brief overview of the ordered logistic regression literature to justify our methodological choices is also offered. The results are reported and discussed. Finally, suggestions for implications and future research are provided.

1.1. Literature review

1.1.1. Green purchase intention

The intention is a motivational element that influences behavior that demonstrates how much an individual is willing to try, and how much effort he or she is preparing to apply and to commit with an action (Ajzen, 1991). Green purchase intention (GPI) declares consumer's willingness to purchase green products declared by the consumer in support of the environment, and this willingness influences on purchase of green products in the future (Akehurst, Afonso, & Gonçalves, 2012; Chan, 2001). Specifically, there is a concern about the ecological quality of the products and the environmental importance held by their purchase decisions (Jaiswal & Kant, 2018). It is also the possibility to choose green products when related to conventional products (Rashid, 2009). Green purchase intention occurs after assessing the reciprocity between the individual and environmental consequences (Akehurst et al., 2012).

Green purchase intention is explained as a different type of environmentally friendly conduct that is carried out to state their concern for the environment. Also, it has been accepted as a proxy for green purchasing behavior (Ramayah, Lee, & Mohamad, 2010).

The literature revealed that gender, collectivism, environmental attitudes, perceived consumer effectiveness and spirituality are significant determinants of attitude and intention (Bedard & Tolmie, 2018; X. Chen et al., 2013; Y. K. Lee, 2017; Paul et al., 2016; Saleem, Eagle, Yaseen, et al., 2018). These factors have not been considered together so far in understanding the attitude towards green products among Mexican university students. Considering the eminent role of these factors, this study is an attempt to fill this gap by formulating the objective of this study to examine the role of gender, collectivism, environmental attitudes, PCE, and spirituality in green purchase intention.

1.1.2. Gender

Literature suggests the importance of taking gender into account when studying environmental behavior because it might influence attitudes, beliefs, opinions, behavior, etc. (Xiao & McCright, 2015). Previous research has pointed out that women are more concerned than men about the environmental issues and hence have more positive attitudes towards green products (Chen et al., 2013; Diamantopoulos, Schlegelmilch, Sinkovics, & Bohlen, 2003; MacDonald & Hara, 1994; Roberts, 1996; Roberts & Bacon, 1997; Samdahl & Robertson, 1989; Schahn & Holzer, 1990; Stern, Dietz, & Kalof, 1993; van Liere & Dunlap, 1980). Zelezny, Chua, and Aldrich (2000) reported that across 14 countries women had stronger environmental attitudes and behaviors than men, also higher levels of socialization to be other-oriented and socially responsible. Although Vicente-Molina et al. (2018) found contrary results regarding gender.

1.1.3. Collectivism

Collectivism is the degree to which individuals of a society are integrated into groups. The members of these strong groups have often extended families and protect each other for unconditional loyalty (Hofstede, 2011; Sreen et al., 2018). Collectivism has been found to influence different kinds of social conduct (Lee, 2017). Literature finds that collectivists values are connected with pro-environmental purchase behavior (Arisal & Atalar, 2016). It has also been argued that consumers in collectivist culture possess more altruistic and other-oriented consumption habits (Bedard & Tolmie, 2018; Evanschitzky et al., 2014).

On the other side, some authors do not find that green purchase intention is directly affected by collectivism; instead, it is through perceived consumer effectiveness (Ali et al., 2019; Kim & Choi, 2005). However, previous studies in emerging markets have indicated the opposite results for the relation between collectivism and green purchase intention. Varshneya, Pandey, and Das (2017) argue that for products that have not extended to masses, collectivism in a society does not influence on green purchase behavior or intention. While one more study on emerging markets (Nguyen et al., 2017) also indicates that collectivist populations have a strong willingness to buy green products.

1.1.4. Environmental attitudes

Attitude is defined as a "learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein & Ajzen, 1975:211). It shows what consumers like and dislike regarding buying decisions for products or services (Blackwell et al., 2006). Attitude is the psychological emotion transmitted via the consumers' evaluations and, if possible, behavior intentions are more likely to be positive (Chen & Tung, 2014). Therefore, consumers choose green products if they have positive attitudes concerning the conservation of the environment (Paul et al., 2016). Also, an attitude has been pointed out as the main predictor of behavior intention (Kotchen & Reiling, 2000) and as one of the main preceding variables that affect purchase intention and behavioral action of green consumers (Chen & Tung, 2014; Perrea et al., 2014; Prete et al., 2017).

Accordingly, the green product literature reveals that consumers with a more favorable attitude towards these products are expected to exhibit a high degree of their involvement in purchase intention of such products in many cultures (Chen & Chai, 2010; Lee, 2008; Mostafa, 2007; Paul et al., 2016).

Furthermore, attitude involves judgments on whether the behavior been considered is good or bad, and whether the individual wants to do the behavior (Leonard et al., 2004). Besides, it is mentioned that attitude is the main predictor of behavior intention (Ramayah et al., 2010).

1.1.5. Perceived consumer effectiveness (PCE)

Perceived consumer effectiveness (PCE) is a concept that dates back to the 1970s. PCE is described as the consumers' perception of the degree to which their efforts can make a difference in solving environmental problems (Ellen et al., 1991). As a significant component in green consumer confidence, a consumer's PCE level may affect his or her willingness to engage in environmental behaviors (Kim, 2011).

Researchers have studied PCE as an important determinant of consumers' environmental-friendly behavior (Akehurst, Afonso, & Gonçalves, 2012; Ellen et al., 1991; González, Felix, Carrete, Centeno, & Castaño, 2015; Jaiswal & Kant, 2018; Kabadayı, Dursun, Alan, & Tuğer, 2015; Kim & Choi, 2005; Lee, 2017; Saleem, Eagle, Yaseen, & Low, 2018; Vicente-Molina, Fernández-Sainz, & Izagirre-Olaizola, 2018; Yarimoglu & Binboga, 2019; Zhao, Geng, Liu, Tao, & Xue, 2018). Among the factors examined as an antecedent to environmentally friendly behavior, PCE has been found to have the highest explanatory power (Roberts, 1996). Ellen et al. (1991) discovered that PCE has an important role in diverse environmentally conscious behaviors (e.g. green purchasing, recycling, and support of green civic organizations). Roberts (1996) suggested that PCE is the best predictor of ecologically conscious consumer behavior.

1.1.6. Spirituality

Spirituality has been conceptualized as a personal search for comprehending the answers of fundamental questions about life, about meaning, and about relationships to the sacred or transcendent, which may (or may not) lead to or arise from the evolution of religious rituals and the institution of a community (Koenig et al., 2000). So spirituality refers to an individual's internal orientation towards understanding existence in a wider consciousness "that binds all things into a more unitive harmony" (Piedmont, 1999). Spirituality is an important construct in green marketing research, and even more in markets with strong spiritual influence (Saleem, Eagle, & Low, 2018). Also, spirituality, as an individual's characteristics is related to ethical attitude and behavior. It has been considered a relevant factor in analyzing how consumers behave (Chairy, 2012).

There is scarce literature that analyses and provides evidence of the importance of connections between spirituality and pro-environmental behaviors (Afsar et al., 2016; Chairy, 2012; Garfield et al., 2014; Saleem, Eagle, Yaseen, et al., 2018).

2. Methodology

2.1. Sample and data collection

The sample of the research is 100 undergraduate students of a faculty of a public university in Tamaulipas (Mexico) in the city of Tampico. The use of students as subjects of analysis has been questioned and considered as a potential source of bias. However, Exadaktylos, Espín, and Brañas-Garza (2013) showed that they do not behave differently from a population made up of participants other than students. One of the most important advantages of using student samples is related to homogeneity. Students constitute a homogeneous group that leads to more accurate theoretical predictions than heterogeneous samples (Calder et al., 1981).

Convenience sample was used, considering the number of students of the last three semesters of the faculty. The members of the sample were contacted mainly in their classrooms. The sample represents approximately 10% of the total population (3 questionnaires were discarded because they were incomplete). Of these questionnaires, 50 were applied electronically through Google Forms. The remaining was applied in person,

among students in classrooms. The application of the questionnaires was applied within 20 days for both forms (electronic and face-to-face).

The questionnaire contained questions, which were pretested and revised to clarify the meaning and remove all ambiguity. Respondents consisted of 67% female and 33% male. In terms of age, 79% of the respondents were between 18-22 years old.

2.2. Measures

Constructs of the research model were measured using five-point Likert type multi-item scales (see Appendix A). Collectivism was measured using the three items translated from the scale of Kim (2011) measured from 1= not at all important to 5=extremely important. Environmental attitudes scale was adapted from Dunlap and Van Liere (1978) and Kim (2011), the three items were assessed on a scale were 1= strongly disagree and 5= strongly agree. Perceived consumer effectiveness (PCE) was measured with a three-item validated scale from Berger and Corbin (1992) and Roberts (1996), also measured with a five-point scale (1= strongly disagree and 5= strongly agree). Spirituality was measured by four items as created by Stillman, Fincham, Vohs, Lambert, and Phillips (2012), with endpoints of 1= not at all true of me to 5= very true of me. Three statements were used to measure respondents' intention to engage in green purchases Chan (2001), Ling-Yee (1997), and Taylor and Todd (1995), which make reference to green products in general. The three statements were coded on a four-point scale with 1= very unlikely and 4= very likely. Several questions related to socio-demographic factors were included in the initial part of the questionnaire, though only gender (1 = female, 0 = male) and age are analyzed here.

2.3. Ordered logistic regression model/Proportional odds model

We are familiar with models where continuous outcome variable, Y , is regressed on an explanatory variable, X . But if the observed Y is not continuous—instead, it is a collapsed version of an underlying variable, Y^* (Long & Freese, 2014). As people cross thresholds on this underlying variable their values on the observed ordinal value Y changes. For such variables, known as limited dependent variables, it is known the interval that the underlying Y^* falls in, but not its exact value. Ordinal regression techniques enable us to estimate the effects of the X s on the underlying Y^* . A series of cumulative logit models are presented in an ordered logit, the original ordinal variable is collapsed into two categories and a series of binary logistic regressions are run. First, it is category 1 (very unlikely) versus categories 2, 3, 4 (unlikely, likely, very likely) ($y \geq 2$); then it is categories 1 & 2 (very unlikely, unlikely) versus categories 3 & 4 (likely, very likely) ($y \geq 3$); then, finally, categories 1, 2, and 3 (very unlikely, unlikely, and likely) versus 4 (very likely) ($y \geq 4$). A positive coefficient means that increases in the explanatory variable lead to higher levels of support (or less opposition), while negative coefficients mean that increases in the explanatory value lead to less support (or stronger opposition) (Williams, 2016).

In a proportional ordered logistic regression, the log-odds ratios, and thus the odds ratios, are assumed to be constant across the ordered categories of the outcome and assumed only to differ by the levels of the explanatory variable. However, the intercepts are allowed to vary across the categories of the outcome variable giving a series of parallel lines with constant slope but with different intercepts (Dohoo et al., 2009; Hosmer & Lemeshow, 2000; Vicente-Molina et al., 2018).

The ordered logit model is also sometimes called the proportional odds model because, if the assumptions of the model are met, the odds ratio will stay the same regardless of which of the collapsed logistic regression is estimated (hence the term proportional odds assumption is also often used) (Williams, 2016). A test devised by Brant (1990) (Long & Freese, 2014) is commonly used to assess whether the observed deviations from what the proportional odds model predicts are larger than what could be attributed to chance alone (Williams, 2016). A

Brant test provides both a global test of whether any variable is significant in the model, as well as specific significance tests for each explanatory variable separately (Agga & Scott, 2015; Williams, 2006).

This kind of model is employed for the current analysis because the environmental intention is associated with a qualitative description and cannot be given a precise numerical value. This model allows the effect of each explanatory factor on the probability of a specific choice of behavior to be measured. Additionally, it can specify the sensibility of the dependent variable (green purchase intention) to changes in explanatory factors (Vicente-Molina et al., 2018). This type of discrete model has been used in economic and marketing applications, including consumer brand and recycling preferences (Nixon et al., 2009).

3. Results

The dependent variable—green purchase intention—comprises three items: “Over the next month, I will consider buying products because they are less polluting”, “Over the next month, I will consider switching to other brands for ecological reasons”, and “Over the next month, I plan to switch to a green version of a product”. An average was calculated considering the likelihood (very unlikely= 1 and very likely= 4) each student responded to the items. Table 1 shows the distribution of the dependent variable according to gender. 63% of the students responded that it is likely they will buy green products. However, more female participants (45%) are in this category.

Table 1
Distribution and composition of the dependent variable

Green purchase intention	Male (%)	Female (%)	% Total sample
1	4	1	5%
2	12	8	20%
3	18	45	63%
4	3	9	12%

The ordered logistic regression model was carried out using R Statistics Software. The results are shown in Table 2. Only the gender and the perceived consumer effectiveness are significantly associated with green purchase intention ($p > 0.0249$ and $p < 0.0001$). Brant test showed that the assumption of proportionality of the log odds (β 's) across the different independent variables was not significantly violated, except for collectivism ($P=0.09$) (Table 3).

These results show that females are more likely to be in higher categories (Coefficient= 1.607). Also, as individuals PCE attitude increases to more positive perspectives, we expect about 1.4350 increases in the value (more positive attitude) of GPI in the log odds value, given that all other variables in the model are held constant.

The model presented here resembles the results in past studies that analyzed gender, our results support the majority of previous studies: undergraduates at a large university in northern New York State (Stern et al., 1993), students of a rural Midwestern university in the U. S. A. (MacDonald & Hara, 1994), and undergraduate students from 14 countries (Zelezny et al., 2000). Regarding PCE, our results support several studies with similar samples: undergraduate students of a Midwestern university in the U. S. A. (Kim & Choi, 2005), undergraduate students from a university in Kocaeli (Turkey) (Kabadayı et al., 2015), and students in the University of the Basque Country in Bizkaia (Spain) (Vicente-Molina et al., 2018). Also, concerning collectivism our results show that this factor is not significantly associated with green purchase intention (Ali et al., 2019; Varshneya et al., 2017).

Table 2
Ordered logit model

Obs	100	Model Likelihood	Discrimination	Rank Discrim.		
max deriv	5e-10	Ratio Test	Indexes	Indexes		
		LR chi2	34.17	R2 0.333		
		d.f.	6	g 1.487		
		Pr(> chi2)	<0.0001	gr 4.425		
				gp 0.228		
				gamma 0.510		
				tau-a 0.280		
				Brier 0.142		
	Coef	S.E.	Wald Z	Pr(> Z)	t value	p value
y>=2	0.2926	4.0141	0.07	0.9419	-0.07880388	9.37E-01
y>=3	-2.2001	4.0048	-0.55	0.5828	0.54349662	5.87E-01
y>=4	-6.0702	4.0549	-1.5	0.1344	1.491357	1.36E-01
GEN	1.0607	0.473	2.24	0.0249	2.24097977	2.50E-02
COL	0.2682	0.2623	1.02	0.3065	1.02214309	3.07E-01
EA	-0.2828	0.3321	-0.85	0.3945	-0.85259775	3.94E-01
PCE	1.435	0.3518	4.08	<0.0001	4.07836957	4.54E-05
SP	0.1181	0.2758	0.43	0.6687	0.42912084	6.68E-01

Table 3
Brant test

Test for	X2	df	probability
Omnibus	11.78	12	0.46
GEN	1.37	2	0.50
AGE	1.09	2	0.58
COL	4.92	2	0.09
EA	2.86	2	0.24
PCE	2.09	2	0.35
SP	0.12	2	0.94
H0: Parallel Regression Assumption holds			
Omnibus	11.7826478	12	0.4632897
GEN	1.3672119	2	0.50479345
AGE	1.0942324	2	0.57861601
COL	4.922795	2	0.08531564
EA	2.8558399	2	0.23980721
PCE	2.0912456	2	0.35147286
SP	0.1170677	2	0.9431463
X2 df probability			

4. Conclusions

Environmental problems have drawn attention from the public and scholars. Also, business managers have developed strategies to support green attitudes and consumption. Identifying and understanding how various factors affect the intention of green purchasing is a critical topic of green behavior discipline. Accordingly, the current study's objective was to explain undergraduate students' green purchase intention. The use of an ordered logit model and R statistics software to interpret the model provided results that differ from previous literature. Which indicate that environmental attitudes (Chen & Tung, 2014; Chen & Chai, 2010; Lee, 2008; Mostafa, 2007; Paul et al., 2016; Perrea et al., 2014; Prete et al., 2017; Ramayah et al., 2010) and spirituality (Afsar et al., 2016; Chairy, 2012; Garfield et al., 2014; Saleem, Eagle, & Low, 2018; Saleem, Eagle, Yaseen, et al., 2018) are attitudes that are associated with green purchase intention. This result might be caused by cultural values and beliefs, which are not included in the model.

This research contributes to the literature by showing that gender (Chen et al., 2013; Diamantopoulos et al., 2003; MacDonald & Hara, 1994; Roberts, 1996; Roberts & Bacon, 1997; Samdahl & Robertson, 1989; Schahn & Holzer, 1990; Stern et al., 1993; van Liere & Dunlap, 1980; Xiao & McCright, 2015; Zelezny et al., 2000) and PCE (Akehurst et al., 2012; Ellen et al., 1991; González et al., 2015; Jaiswal & Kant, 2018; Kabadayı et al., 2015; Kim & Choi, 2005; Lee, 2017; Saleem, Eagle, & Low, 2018; Vicente-Molina et al., 2018; Yarimoglu & Binboga, 2019; Zhao et al., 2018) are important factors that play a role in green purchase intention. Also, regarding collectivism, our results agree with the trend that does not relate this factor to the intention of green consumption (Ali et al., 2019; Varshneya et al., 2017). Thus the female gender is more likely to have a more positive attitude towards green products and as PCE increases students have a greater possibility to have a positive attitude towards environmentally friendly products. Moreover, students who are women and have higher-level perceived consumer effectiveness are more likely to engage in pro-environmental behavior.

Taken together, the results suggest that it is important to increase individuals' awareness of environmental issues and enhance the perceived efficacy of their contribution to improving them. Given that pro-environmental attitudes are enduring beliefs, such strategies require efforts and cooperation among educational institutions, corporations, businesses, and government organizations. By analyzing students' perception of green purchase it is clear that these findings can be useful to help marketers and policymakers carry out more effective strategies to encourage students and consumers to engage in sustainable practices. Marketers involved in green consumption should recognize the importance of PCE for an individual, and hence, should highlight the positive contributions of pro-environmental behavior through the information and emotions sent by different channels (p. e. social networks). Green marketers can expand PCE in providing a specific consumer group with specific examples that show that their behavior can effectively make a difference. Besides, this research showed that female students expressed higher purchase intentions of green products than did men. Therefore, it is suggested that green product managers should give special attention to this consumer segment.

Our findings also carry the policy implications that insufficient environmental attitudes and spirituality might be detrimental to pro-environmental intentions. It is important to upturn these attitudes among the population. Also, increasing the availability of green products may help inspire the intention to buy green products. Therefore, the government should create policies that encourage organizations to manufacture more of such products.

There are a few limitations to this study. Firstly, the sample size is relatively small. Further, the study is limited to the educated respondents which may result in biased findings as educated people may be more prone to socially desirable responses (Kaiser et al., 2008). The results cannot be extrapolated to the general population,

or even to the university students or geographical contexts. Thus future studies should increase the sample size and collect data from different universities.

Secondly, this study examined the green purchase intention in general and did not consider specific kinds of products or behavior. A third limitation is that only collectivism, environmental attitudes, PCE, spirituality, and gender relation with GPI were analyzed. However, there are many antecedents of GPI in previous studies (perceived environmental knowledge, environmental concern, marital status, income level, motivation, etc.).

This study's proposed model presents a wide variety of future research possibilities. Future studies may opt for a random sampling approach among the population to get a generalized reporting of consumers' purchase intention and behavior. Also, future scholars could determine the long-term pro-environmental engagement of students along with different segments of green consumers via quantitative and qualitative methods. Further future studies can be carried out by testing the model with actual behavior by using an experimental design. This may enable us to further explore the relationships among variables. The application of these statistical techniques to different samples and times is also required to observe its consistency and expand the generalization of this research model in the realm of purchase intentions on green products among young consumers. Despite these limitations, the study makes several contributions to the field of green purchase intention.

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Appendix A

Collectivism (Kim, 2011)

I maintain harmony in my group.

I respect the majority's wish.

I sacrifice self-interest for my group.

Environmental attitudes (Dunlap & Van Liere, 1978) and (Kim, 2011)

When humans interfere with nature it often produces disastrous consequences.

The balance of nature is very delicate and easily upset.

We are approaching the limit of the number of people the Earth can support.

Perceived consumer effectiveness (PCE) (Berger & Corbin, 1992) and (Roberts, 1996)

I feel capable of helping solve the environmental problems.

I can protect the environment by buying products that are friendly to the environment.

I feel I can help solve natural resource problems by conserving water and energy.

Spirituality (Stillman, Fincham, Vohs, Lambert, & Phillips (2012)

I feel God's presence.

I experience a connection to all life.

I feel a selfless for others.

I feel deep inner peace and harmony.

Green purchase intention (Chan, 2001), (Ling-Yee, 1997) and (Taylor & Todd, 1995)

Over the next one month, I will consider buying products because they are less polluting.

Over the next one month, I will consider switching to other brands for ecological reason.

Over the next one month, I plan to switch to a green version of a product.