

# 3<sup>rd</sup> Parahyangan International ACCOUNTING & BUSINESS CONFERENCE 2017

## PREDICTING GREEN PURCHASE INTENTION OF GENERATION Y: AN EMPIRICAL STUDY IN INDONESIA

**Sheila F. Eles**

chell.princeton@gmail.com

**Sabrina O. Sihombing<sup>4</sup>**

Universitas Pelita Harapan

sabrina.sihombing@uph.edu

### **Abstract**

*Environmental awareness is growing up as the environmental issues nowadays are significant to human lives. Some manufacturers started to entering green product market and targeting green consumers. Many studies have been conducted to examine the influence of several factors such as environmental knowledge, environmental concern, attitudes, and price on green purchase intention. However, just few studies stated that price also influenced the decision-making on buying green products specifically in the context of Indonesian. Whereas price become one of the most important factors considered by consumers. This study investigated the relationship of environmental knowledge, environmental concern, subjective norms, price fairness, attitudes, and green purchase intention. The research model was tested by using self-administrated questionnaires of 200 students in private university. Before the questionnaires were distributed, the pilot study was conducted to assess the reliability and validity of the instruments. The hypotheses were measured by Structural Equation Model (SEM). The result showed that there were three hypotheses which were supported and two unsupported hypotheses. This research gives recommendations for future research.*

**Keywords:** *environmental knowledge, green products, environmental concern, subjective norms, price fairness, attitudes, green purchase intention*

**JEL Classification:** *Q56*

---

<sup>4</sup> Corresponding Author



## INTRODUCTION

Environmental issues globally become an important aspect in human life as everyone starts concerning about the issues. In recent years, market place turns out into more environment-friendly rather than foretime (Ansar, 2013). Businesses are trying to attract market with the concept of green marketing. The technology has been developed to enable them entering the potential market regarding current global issues. The growing issues bring the broad impact to all fields. Eco-friendly products considered as an opportunity to enter wide range of market and being developed in many aspects (Ishaswini & Datta, 2011; Coleman *et al.*, 2011).

The trends of organic food, eco-friendly electronics or products, recyclable packaging, and even safe-materials-cosmetics are already spread out. Body Shop is one of the manufacturers that concern about using materials derived from nature and focusing on how the environmental damage can be minimized (Ling, 2013; Teng, 2011). The issues are not only triggering business and manufacturers, but also consumer itself. Consumers tend to avoid products that are possibly contaminated by unsafe substances. They begin to make environmental consideration for the products they purchased (Karatu & Nik Mat, 2015; Barber *et al.*, 2009). That consideration can be taken from the people around them who had past experience towards the products.

Many studies have been conducted to examine the influence of several factors such as environmental knowledge (Effendi *et al.*, 2015; Karatu & Mat, 2015; Ali & Ahmad, 2012; Noor *et al.*, 2012; Saleki *et al.*, 2012; Gracia *et al.*, 2010; Magistris & Gracia, 2008; Mostafa, 2007); environmental concern (Irianto, 2015; Karatu & Mat, 2015; Suki, 2013; Ali & Ahmad, 2012; Salleh, *et al.*, 2010; Ishaswini & Datta, 2011); attitudes (Effendi *et al.*, 2015; Irianto, 2015; Anvar & Venter, 2014; Terenggana *et al.*, 2013; Mahesh, 2013; Suprpto & Wijaya, 2012; Chen & Chai, 2010); subjective norms (Effendi *et al.*, 2015; Irianto, 2015; Tarkiainen & Sundqvist, 2005); and price (Irianto, 2015; Karatu & Mat, 2015; Suki, 2013; Ling, 2013; Sangkumchaliang & Huang, 2012; D'Souza *et al.*, 2007; Hansla *et al.*, 2008) on green purchase intention, however, just few studies stated that price also influenced the decision-making on buying green products specifically in the context of Indonesian (Effendi *et al.*, 2015; Irianto, 2015). Whereas price become one of the most important factors considered by



consumers. Some of the recent studies just included price as complementary variables below other variables and the role of price fairness has been ignored since it is lack of empirical evidence. Furthermore, mostly previous research which also include subjective norms, were following The Theory of Planned Behavior, where subjective norms affected purchase intention. On the other hand, some research found that subjective norms could affect attitude as well (Irianto, 2015; Saleki *et al.*, 2012; Han *et al.*, 2010; Aertsens *et al.*, 2009; Kim *et al.*, 2009; Chow & Chan, 2008; Tarkiainen & Sundqvist, 2005).

Hence, this study aims to examine the influence of consumers' environmental knowledge, environmental concern, subjective norms, price fairness, and attitudes in purchasing green product. Through this study, price is suggested being another factor that supposed to put into considerations. The literature review section consist related theories and previous studies regarding green purchase intention. The successful section defines the research design and methodologies. Result and discussion of findings are showed next, followed by conclusion and recommendation.

## **LITERATURE REVIEW**

### **Environmental Knowledge**

Environmental knowledge is defined as individual common knowledge of facts, concept, and relationship regarding the natural environment as well as knowledge about an issue effect significantly over decision making process (Zainudin, 2013; Abdul Rashid, 2009). In similar vein, Conraud-Koellner and Rivas-Tovar (2009) defined environmental knowledge as the sets of ecological knowledge that an individuals have of environmental topics. They believe there are three sources knowledge can be derived from: first, ecological ethnocentrism; second, information about environmental issues; third, personal experience and environmental insight.

On the other hand, Wu and Teng (2013) defined green or environmental knowledge as how much the consumer knows about environmental or green issues. A study by D'Souza (2006) indicated how environmental knowledge evolves in two forms. The two forms, thus, concern to the consumer. First, consumers have to be educated to comprehend the common



impact of the environmentally product. Second, consumer's knowledge about the product that definitely produced in an eco-friendly way. Previous study, furthermore, examined that consumers who have knowledge about environmental issues will surely have a higher awareness and potentially present that attitudes toward green products (Aman, 2012). With regard to consumer behavior, the higher the ability of interpreting symbols, means that also higher environmental knowledge itself (Haryanto & Budiman, 2014). Also, knowledge on environmental issues has a tendency to create awareness in brands and likely positive attitudes towards green brands (D'Souza, 2006)

### **Environmental Concern**

Generally, people are surely concerned about environmental issues. There have been several definitions stated by researchers regarding the environmental concern. Lee (2008) is defined environmental concern as the level of emotional complicity in environmental issues. The way consumers express environmental concerns based on product characteristics, exactness of eco-friendly product claims, information given on the products and the advantages (Luchs *et al.* 2010).

Moreover, Alhassan (2007) conceptualized environmental concern as a common attitude that represents the extent to which consumer feels anxious about the environmental condition. Another definition of environmental concern is also purposed by Dunlap and Jones. Dunlap and Jones (2002) then defined environmental concern as the degree to which people are aware to environmental issues and give a contribution to solve those issues. Aside from definition above, Magistris and Gracia (2008) connected the environmental concern with consumers' awareness.

According to Magistris and Gracia (2008), consumers who are more aware on the environmental damage and have a high involvement on environment practices will be more willingly to purchase organic food products. Besides, mostly Western consumers and also other developing countries belong to middle classes; have presented their concern towards environmental issues (Ali *et al.*, 2015). In fact, they have done personal efforts to reduce the impact on the environment.



### **Subjective Norms**

The Theory Reasoned of Action by Fishbein and Ajzen (1975) elaborated that intention is predicted by two factors, the individual's attitudes towards the result of behavior and the point of view of individual's social environment, called as subjective norm. Subjective norms state the beliefs of individuals about how reference groups will regard them if they present a particular behavior (Al-Swidi *et al.*, 2013). In carrying out a purchase, consumers need to seek other resources before deciding to buy, such as information, knowledge, self-confidence and so on (Hasbullah, 2014).

Subsequently, Ajzen (2012) explicates that people can hold normative beliefs through more than one referent individual or group. Generally, based on research, referents are a person's partner, close family and friends, and also likely health professionals or coworkers. That normative beliefs concerning such social referents combine to yield on the whole perceived social pressure or subjective norm. Relatives, friends, colleagues and business partners can intensely influence the individual around them (Han *et al.*, 2010).

Gotschi *et al.* (2007) found that norms learnt at home, bring a significant impact to develop positive attitude. People continuously follow their social norms not simply because they got pressure from social environment. But also, they give information what appropriate behavior should be done (Bamberg *et al.*, 2007). Subjective norms along with attitudes and perceptions of control emerge consistently from the beliefs, no matter how those were formed, by this way beliefs influence intentions and behavior as well (Ajzen, 2014).

### **Price Fairness**

According Kotler and Amstrong (2010) price is the amount of money charged to customers for utilizing or having a product or service. A bunch of customers have a tendency to pay low price because it is more attractive for them (Kaura, 2012). In addition, Kaura (2012) adopted definition from Xia *et al.* (2004) and defined price fairness as the appraisal done by consumers on the price offered whether it is plausible.

Based on D'Souza *et al.* (2007) customers are sensitive toward green product pricing. Sometimes, even the customers have already been familiar with kind of green behavior such as recycling, they are being reluctant to pay more (Hansla *et al.*, 2008) In other words, the



price sensitive green consumers were defined as the customers who are sensitive toward the price range yet practically they realizes the effect of using non-green product to the environment (Ling, 2013).

A study by Samkumchaliang (2012) indicates if a consumer cannot obviously distinguish between organic food and conventional food products, premium price charged can be confusing and influence the purchase decision. It is related to price sensitivity. Price sensitivity is the awareness of consumers about what will they perceived by buying particular products with the costs they paid (Al-Mamun *et al.*, 2014). Higher perceived price presents greater monetary loss for consumers, and leads to lower purchase intention.

### **Attitude**

The previous research carried out by Anic (2010) explains that attitudes are complicated system consisting of the person's conviction and feeling about the object along with a tendency to act towards the object. Attitudes include cognitive, affective and conative aspects, and reflect the way people react to a stimulus. Based on concept, attitudes are divided into two: general and specific attitudes (Sun and Wilson, 2008). Furthermore, attitudes are significant to consumer behavior research and marketing often find ways to ensure and transform attitudes about product, brands, and services (Barber *et al.*, 2009).

On the other hand, attitudes can be defined as continuously likeable or unlikeable evaluation, feelings, and tendencies toward an object or idea (Amstrong & Kotler, 2009). Though attitudes are frequently formed as result of direct contact to the object, attitudes can be formed even without actual experience with specific object (Terenggana, 2013). Subsequently, Chyong *et al.* (2006) identified that attitudes are the most consistent explanatory factor in assessing consumers' willingness to purchase green products.

Apart from the definitions, attitude does reflect what consumers like and dislike (Blackwell *et al.*, 2006). In fact, consumers attitude of reflecting the like or dislike can be possessed from either positive or negative attitude. Rahim (2009) found that consumers will tend to possess positive attitude towards green foods as they consider about their health and environment. Therefore, environmental attitudes frequently become the reason for consumers in product purchasing decisions.



### **Green Purchase Intention**

Meanwhile, a green product refers to a product which specifically nontoxic, recyclable, less pollutant, minimally packaged and contains natural materials (Pavan, 2010; Ottman, 1998). Household equipment's produced with eco-friendly materials, reachable packaging, energy-efficient light bulbs and non-synthetic dyes or perfumes are some of the examples of green products in the market (Mostafa, 2007). Yet, efficient lighting and organic foods is the most renowned green product amongst consumers (Figueiredo & Guillen, 2012).

In case of definition of intention, Ajzen (2005) stated that intention is behavioral inclination until precise time and occasion, and then will be realized in the form of action. Next, the idea of intention is supported by Halim and Hameed (2005). They defined the term of consumer purchase intention as consumer who consider the product in the future and make a repeated purchase and would coming back to their preference. The customers draw up positive purchase intention over a period of time. Consequently, before finally deciding to buy a product, they seek for information and the collective of the desired information, and customers feel more confident about their choice (Rozekhi *et al.*, 2014).

On the other side, green purchase intention is then defined as a concept in which customers purchase eco-friendly products and opt to buy these products rather than other conventional products. Consumers are willing to buy because those products are less harmful for environment (Saeed *et al.*, 2013). In similar vein, Ali and Ahmad (2012) conceptualized green purchase intention as someone's probability and willingness of choosing eco-friendly products as preference over the traditional ones in their purchase considerations.

### **Green Marketing and Generation Y**

The conference of marketing ecology was first taken place in 1975 by The American Marketing Association (AMA). The term of marketing environment well-known as green marketing was introduced in 1980. AMA defined green marketing as ways of marketing products which are considered safe, as the combination of several activities such as product modification, the changes of production process, packaging, advertisement strategic, and the development of marketing fulfillment awareness among industry (Yazdanifard & Mercy, 2011). Recent years, consumers became more aware about how their behavior related to the



environment (Sharaf et al., 2015). Green marketing differs from common marketing. Green marketing not simply focus on social aspect and human life but also the natural aspect (Polonsky, 2011).

As marketing always grows up, the development of green marketing cannot be separated from the role of Generation Y. Generation Y is the batch of people born in the midst of 1980 top 1999 (Crampton & Hodge, 2009). This generation is also known as The Millennial. The whole life of Generation Y is close to the technology. Social media have a strong influence on their buying behavior (Bolton et al., 2013). Generation Y believe that the change of global climate is caused by the human's activities. Therefore, Generation Y has a tendency to purchase green products rather than other consumers (Ottoman, 2011). Green marketing nowadays affected by Generation Y. Green marketing changes the traditional way of marketing to the modern one, which is promotional by social media and internet.

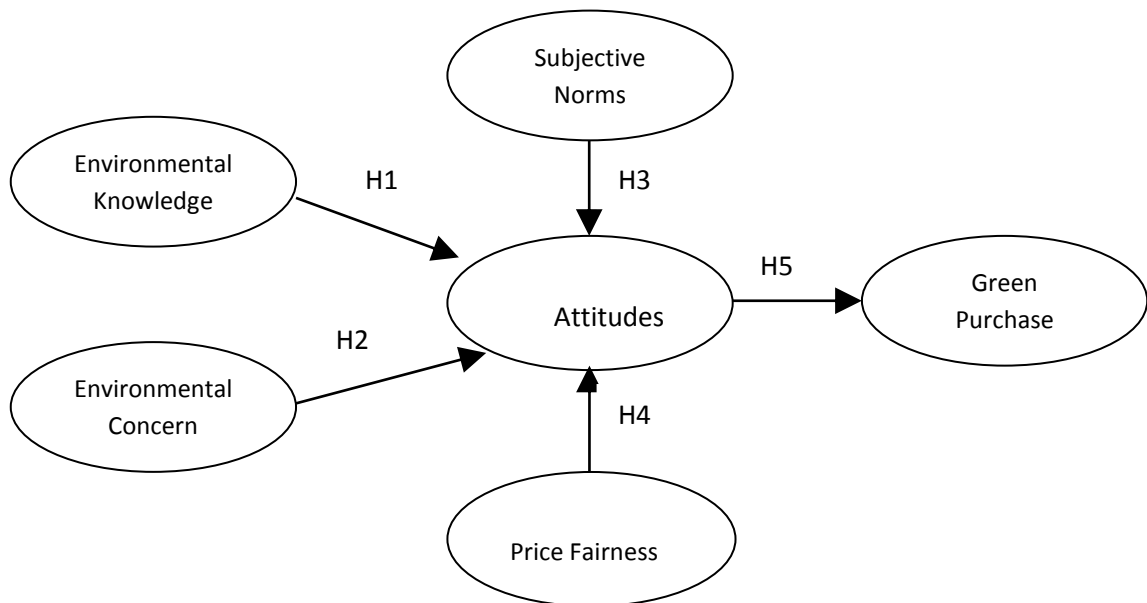


Figure 1. Research Model

Source: developed for this research



## **HYPOTHESIZED RELATIONSHIP**

### **The Relationship between Environmental Knowledge and Attitude**

Knowledge assists to build strong attitudes. Knowledgeable people with strong attitudes are careful and excellence in information (Azila *et al.*, 2012). Banytne *et al.* (2010) made an assumption that the better green consumers obtain the information and the more they find out about the qualities of environmental friendly product, the more they will be motivated to purchase the product. Environmental knowledge tends to build awareness certain products and potential positive attitudes towards green products (D'Souza *et al.*, 2006). The previous studies discovered that environmental knowledge is positively related to attitudes (Akbar *et al.*, 2014; Saleki *et al.*, 2012; Gracia *et al.*, 2010; Magistris & Gracia, 2008; Mustofa, 2006; Tanner & Kast, 2003). Hence, it is hypothesized as:

**H<sub>1</sub>:** *The environmental knowledge is positively related to the attitude*

### **The Relationship between Environmental Concerns and Attitude**

Environmental concerns drive consumer to have attitude towards organic food (Irianto, 2015; Aman *et al.*, 2012; Kim & Chung, 2011; Chen, 2009). According to Lee (2008) environmental concern is the second top predictor influencing consumers' attitude. People with high environmental concerns show the more positive attitude towards the environment (Laskova, 2007). Hence, it is hypothesized as:

**H<sub>2</sub>:** *The environmental concern is positively related to the attitude*

### **The Relationship between Subjective Norms and Attitude**

The research by Tarkiainen and Sundqvist (2005) summed up that subjective norm implicitly impact the intention to buy organic food through attitude. The theory from Ajzen (2014) showed that subjective norms along with attitudes and perceptions of control emerge consistently from the beliefs. Furthermore, when predicting the behavior of an individual, the particular behavior will have close relationship with the reference group (Wu & Chen, 2014). Previous researches show that subjective norms had a direct impact on attitude (Rahab & Wahyuni, 2013; Ibragimova, 2012; Kuang *et al.*, 2012; Mahmood *et al.*, 2011; Teh & Yong,



2011; Teh *et al.*, 2011; Chen *et al.*, 2009; Matos *et al.*, 2007; Lin & Lee, 2004). Hence, it is hypothesized as:

**H<sub>3</sub>:** *The subjective norms has a positive effect on attitude toward green products*

### **The Relationship between Price Fairness and Green Purchase Intention**

Consumers are often being sensitive to premium prices of green products (Bonini & Oppenheim, 2008). They started to make a comparison with conventional ones. People may have favorable attitudes such as recycling and buying green product but willingness to pay more can't be predicted (Anvar, 2014, Hansla *et al.*, 2008). Young *et al.* (2010) identified price as a constraint in purchasing green product. Researcher stated that price reduces the influence of green product attitude. Hence, it is hypothesized as:

**H<sub>4</sub>:** *The price fairness is negatively related to the attitudes*

### **The Relationship between Attitudes and Green Purchase Intention**

The more positive attitudes towards a behavior, the stronger is the intention to bring out such behavior (Ajzen, 1991). Past studies indicate that belief is the good predictor of intention (Sukato & Barry, 2009; Wilson, 2007; Blackwell *et al.*, 2006; Fishbein & Ajzen, 1975) Attitudes, feelings, experiences, and social aspects are the factors affecting beliefs. Those factors must be considered to understand what consumers believe about green marketing and how they may take that belief into action. Previous studies shows the significant relationship between attitude and intention (Rahab & Wahyuni, 2013; Ibragimova *et al.*, 2012; Kuang *et al.*, 2012; Cai and Shannon, 2011; Mahmood *et al.*, 2011; Teh & Yong, 2011; Teh *et al.*, 2011; Zhang, 2011; Bock *et al.*, 2010; Chen *et al.*, 2009; Lin, 2007; Wu & Li, 2007; Lin & Lee, 2004). In the specific, several studies in green products studies show that attitudes are positively related to green purchase intention (Rahim, 2009; Magistris & Gracia, 2008; Mostafa, 2006; Tarkiainen & Sundqvist, 2005). Hence, it is hypothesized as:

**H<sub>5</sub>:** *Attitudes positively related to the green purchase intention*



## RESEARCH METHOD

### Sample and Data Collection

The respondents of this study are students in a private university. This study was using self-selected non-probability, judgment sample. Therefore, there was a major criteria directed the selection of the respondents, which is those who are using Body Shop products or once used one of the Body Shop products. Data collecting was comprised of two steps. The first step is pilot study to determine whether the instrument could be clearly understood by respondents and also examine the reliability and validity of the instrument. A pilot study conducted to 50 respondents. The second one is the actual research. The research data was obtained through self-administrated questionnaire. It was distributed by giving respondents a time to fill out the questionnaire. Data was collected over three week's period. In total, 200 students in a private university were asked to complete the questionnaire. Sample size used in this study is 200, which is following Hair et al. (2006)

### Measures

*Environmental Knowledge.* This construct was measured by enquiring respondents about general environmental knowledge. The items on the construct were assessed using a five-point Liker-type scale (ranging from 1 = strongly disagree to 5 = strongly agree). Four items scale measuring environmental knowledge was adapted from Chan and Lau (2000) and Kaiser *et al.* (1999). The items used in this construct are as follow: (1) A change in climate caused by increased levels of CO<sub>2</sub> in the atmosphere is called the greenhouse effect, (2) All living beings (micro-organism, plants, animals, and humans) are not interdependent with one another, (3) The most effective way to combat global climate change is to reduce energy consumption, and (4) Most smokes in our big city come from automobiles.

*Environmental Concern.* Environmental concern was measured through four items as follow: (1) I care about buying environmentally friendly products, (2) It frightens me to think that much of the product I use is contaminated with pesticides, (3) When I purchase products, I try to make efforts to buy products that are low in pollutants, and (4) I make every effort to



reduce the use of plastic bags. Four items in this construct were adapted from Mostafa (2007) and Roberts and Bacon (1997). The items were measured using a five-point Likert-type scale

*Subjective Norms.* Subjective norms were measured through four items as follow: (1) The trend of buying Body Shop products among people around me is increasing, (2) People around me generally do not believe that it is better for health to use Body Shop products, (3) My close friends and family members would appreciate if I buy Body Shop products, and (4) Many people persuade me that I should buy Body Shop products in order to better lives. The subjective norms scale adapted from Effendi *et al.* (2015) and Al-swidi *et al.* (2013), each assessed by five-point Likert-type scale.

*Price Fairness.* Price Fairness was measured by asking the respondents about their perceptions toward the price offered. The questionnaire consisted of four items were assessed using a five-point Likert-type scale. Those four items such as follow: (1) The price of Body Shop products in accordance with benefit, (2) The price paid in accordance with the quality of Body Shop products, (3) The price I paid was fair, and (4) The price I paid was not affordable. Four items scale measuring price fairness was adapted from Effendi *et al.* (2015) and Khraim *et al.* (2014).

*Attitude.* Following the measurement scale by Chen (2009), Laroche *et al.* (2001), and McCarty & Shrum (1994), the attitude consisted of four indicators. The questions related to attitudes towards the particular product. Four indicators are as follow: (1) I like the idea of green products by Body Shop, (2) The idea of Body Shop is a good idea, (3) I have an unfavorable attitude towards Body Shop products, and (4) Recycling will reduce pollution. All indicators were measured on a five-point Likert-type scale anchored from 1 = strongly disagree to 5 = strongly agree.

*Green Purchase Intention.* This construct was measured by asking respondents about their intentions of green products. Furthermore, green purchase intention was assessed using four-item scale adapted from Chan and Lau (2000) based on a five-point Likert-type scale. The items were as follows: (1) I consider buying Body Shop products because they are less polluting; (2) I intend to buy Body Shop products because they are less polluting, (3) I consider switching to other brands for ecological reasons, and (4) I *don't* intend to switch to other brand for ecological reason.



## **Data Analysis**

Statistical analysis was computed using Statistical Package for Social Sciences (SPSS 22.0). In addition, the hypothesized model of this study (Figure 1) was tested using Structural Equation Model (SEM). In addition, Confirmatory Factor Analysis (CFA) was used to establish the construct validity. For the overall fit of the model, this research used GFI. The calculation used maximum likelihood estimation procedure in order to assess matrix covariant estimation.

## **RESULT**

*Description of the sample.* A total of 200 questionnaires was distributed and collected from students in a private university. Out of these, 185 samples can be used for further analysis, which is 92.5 per cent usable response rate. The goodness of measures was applied by assessing reliability and validity analysis. Reliability testing was conducted first by using the inter-item consistency measure of Cronbach Alpha. Result shows the coefficients alpha ranged from 0.43 to 0.76. Specifically, there are two variables that have lower Cronbach alpha coefficient: environmental knowledge and environmental concern. The concept of reliability assumes that unidimensionality exists in a sample of test items and if this assumption is violated it does cause a major underestimate of reliability (Tavakol & Dennick, 2011, p.54). The high value for Cronbach's alpha indicates good internal consistency, but does not mean that the scale is unidimensional (Tavakol & Dennick, 2011; Gliem & Gliem, 2003). In the specific, Factor analysis is one method to determine the dimensionality of a scale (Tavakol & Dennick, 2011; Gliem & Gliem, 2003). Table 1 shows the result of Factor Analysis.



**Table 1. Factor Analysis Result**

	Component					
	1	2	3	4	5	6
EK2						0.763
EK3						0.770
EC1			0.667			
EC3			0.699			
EC4			0.748			
SN3					0.893	
SN4					0.589	
PF1	0.830					
PF2	0.727					
AT1				0.790		
AT2				0.728		
PI1		0.800				
PI2		0.765				

*Source: analysis of field data*

A 13-items confirmatory factor analysis was also employed. CFA testing allowed research model to give confirmation on the variables in measuring the analyzed factors. The result of confirmatory analysis as follows: GFI= 0.933, AGFI= 0.895, RMR= 0.040, NFI= 0.843, CFI= 0.941, PNFI= 0.621, PCFI= 0.693, RMSEA= 0.051.

**Table 2. Standardized regression weights (CFA)**

		Estimate
EC4	<-- E - C	.629
EC3	<-- E - C	.661
EC1	<-- E - C	.551
SN4	<-- S - N	.994
SN3	<-- S - N	.501
PF3	<-- PF -	.752
PF2	<-- PF -	.647
PF1	<-- PF -	.788
GPI 2	<-- G - PI	.782
GPI 1	<-- G - PI	.712
EK 3	<-- E - K	.350
EK 2	<-- E - K	.435
AT 2	<-- A - T	.702

AT <-- A	.639
1 - T	

Source: analysis of field data

After the CFA is tested, the next step is structural analysis. The following is the results of structural analysis (Table 3 and 4), CMIN= 120.674, GFI= 0.919, AGFI= 0.880, RMR= 0.046, NFI= 0.808, CFI= 0.907, PNFI= 0.630, PCFI= 0.708, RMSEA= 0.062.

**Table 3. Standardized regression coefficient (Structural)**

			Estimate
AT	<---	EC	.320
AT	<---	SN	.101
AT	<---	EK	-.047
AT	<---	PF	.321
GPI	<---	AT	.669
EK3	<---	EK	.425
EC4	<---	EC	.427
EC3	<---	EC	.654
EC1	<---	EC	.563
EK2	<---	EK	.529
SN4	<---	SN	.682
SN3	<---	SN	.710
PF3	<---	PF	.757
PF2	<---	PF	.643
PF1	<---	PF	.782
AT1	<---	AT	.638
AT2	<---	AT	.657
GPI1	<---	GPI	.737
GPI2	<---	GPI	.804

Source: analysis of field data





**Table 4. Structural Equation Model**

	<b>Hypothesized Relationship</b>	<b>Estimate</b>	<b>CR</b>	<b>p-value</b>	<b>Conclusion</b>
H1	Attitude <--- Environmental Knowledge	-0.047	-.341	.773	Not Supported
H2	Attitude <--- Environmental Concern	0.320	2.210	0.027	Supported
H3	Attitude <--- Subjective Norms	-0.101	-.629	0.529	Not Supported
H4	Attitude <--- Price Fairness	0.321	2.066	0.039	Supported
H5	Purchase Intention <--- Attitude	0.669	6.175	***	Supported

*Source: analysis of field data*

According to Table 4, three of five hypotheses are supported. A hypothesis will be indicated as supported one if the correlation is drawn significantly which is critical ratio should be  $\pm 1.96$  and p value is  $\leq 0.05$ . Based on the result above, H<sub>2</sub>, H<sub>4</sub>, and H<sub>5</sub>, are the supported hypotheses while H<sub>1</sub> and H<sub>3</sub> are unsupported hypotheses. Hypothesis 1 reported there are negative relationship between environmental knowledge and attitude. Critical ratio for hypothesis 1 presented negative result that was contradictory with this hypothesis. Therefore, it can be concluded that hypothesis 1 is not supported. On the other hand, hypothesis 2 showed that environmental concern is positively related to the attitude. P value for this hypothesis was in accordance with the requirement value that is  $\leq 0.05$  (i.e. 0.027).

Hypothesis 3 stated the negative relationship between subjective norms and attitude (p value = 0.404). In addition, critical ratio of hypothesis 3 pointed negative result. It implies



that subject norms and attitude have a negative relationship. On the other words, hypothesis 3 was not supported. Hypothesis 4 represented negative relationship between price fairness and attitude's value of hypothesis 4 did not exceed the standard of *p value*. Moreover, hypothesis 5 presented that attitude has a positive relationship to green purchase intention. The result of critical ratio is above 1.96 and *p value* also less than 0.05 (i.e. 0.002)

## DISCUSSION

After the hypotheses were tested, the result showed that three of five hypotheses were supported and the rest was not supported. Supported hypotheses are hypothesis 2, hypothesis 4, and hypothesis 5. On the contrary, unsupported hypotheses are hypothesis 1 and hypothesis 3. The following is further discussion regarding the reasons of either supported or unsupported hypotheses.

Analysis of hypothesis 1 indicated that the hypothesis was not supported. There are three reasons why this hypothesis was not supported. First, the respondents did know about Body Shop products, but completely saw no differences for their health or impact for environment. Second, even if consumers are knowledgeable, still, they have no interest in buying green products such as Body Shop. Consumers may choose other brands which more suitable with their lifestyle. Other brands have more various kinds of cosmetics and or variance. Third, using established and well-known brands, for example Face Shop and Innisfree brought different feeling regarding their pride.

Hypothesis 2 stated that there is positive relationship between environmental concern and attitude. The second hypothesis in this research was supported. Three reasons were found to explain why the hypothesis was supported. First, respondents are aware in buying eco-friendly products and put it into consideration when they make a purchase decision. In addition, respondents also try to reduce the use of plastic bags. Second, respondents felt anxious if the products they used contain harmful materials. Third, previous studies supported that environmental concern is positively related to attitude as well (Irianto, 2015; Aman *et al.*, 2012; Kim & Chung, 2011; Chen, 2009; Lee, 2008; Laskova, 2007). Therefore, hypothesis 4 in this research was supported.



Hypothesis 3 indicated that the hypothesis was not supported. There are two main reasons why this hypothesis was unsupported. First, people around the respondents mostly did not give any contribution in buying decision making. They made one product as the preference based on past experience, advertising, or probably other special offerings, such as promotion and discount. Second, simply few people or even no one used Body Shop products around them. Therefore, the respondents have no any recommendations or suggestions about the Body Shop products. They did not get what benefit or what is good about Body Shop that different from other competitors.

Hypothesis 4 stated that subjective norm is negatively related to attitude. The fourth hypothesis in the research was supported. These are four reasons why the hypothesis was supported. First, the price of Body Shop products is not in accordance with the benefit offered. Respondents thought the price is too high for green products such as Body Shop products. Second, the price respondents paid for Body Shop products were not in accordance with the quality. The price charged by Body Shop is quite high rather than other brands with same average quality. Third, the price offered by Body shop is not fair and not affordable for some respondents.

Hypothesis 5 stated that there is positive relationship between attitude and green purchase intention. The fifth hypothesis of the research was supported. Four reasons were found to explain why this hypothesis was supported. First, respondents thought that the idea of green products run by Body Shop is good and it is likeable. Body Shop is well-known as one of manufacturers that concern about environment and use natural materials (Ling, 2013; Teng *et al.*, 2012). Second, respondents have a favorable attitude towards Body Shop products. Body Shop provided products which less harmful for environment and contained safe materials. Third, respondents agreed that recycling programs done by Body Shop can reduce pollution. Body Shop packaging designed to be recyclable. Fourth, previous studies also supported that environmental attitude is positively related to green purchase intention (Rahim, 2015; Magistris & Gracia, 2008; Mostafa, 2007; Tarkiainen & Sundqvist, 2005; Ajzen, 1991).



## CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

This research was carried out to answer the research questions. Based on the research analysis, can be concluded that three hypotheses were supported and two hypotheses are unsupported. The following are result of hypotheses testing:

- 1) The environmental concern is positively to the attitudes
- 2) The price fairness is negatively related to the attitudes
- 3) Attitude is positively related to the green purchase intention

Apart from the results and purpose, this research was not assuredly exempt from limitations. There are three limitations occurred when the research was conducted. First, this research used non-probability sampling. Judgement sampling was chosen for this research for the purpose of reducing costs, time, and energy. Consequently, not all the population obtains the same opportunity to be chosen as sample. The sample is limited for students in one private university.

Second, unit analysis for the research is students of private university. The respondents for future research can be directed to the larger sample such as students for another university or workers. By using different unit analysis, the result is expected to remain the same. Third, this research just use one object, specifically one brand to be examined (e.g. Body Shop). It will be better if the next research can include more than one object. The aim is to obtain the result more accurately. Therefore, the next researchers are able to implement and assess the similar instrument to get the identical result as well.

## REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen I. (2005). *Attitudes, Personality, and Behavior*. (2nd Ed.). Britain: Open University Press.
- Ajzen, I. (2012). Martin Fishbein's Legacy: The Reasoned Action Approach. *The ANNALS of the American Academy of Political and Social Science*, 640(1), 11-27.
- Ajzen, I. (2014). The Theory of Planned Behavior is alive and well, and not ready to retire: A Commentary on Snichotta, Pesseau, and Araujo-Soares. *Health Psychology Review*.



- Akbar, Waseem et al. (2014). Antecedents Affecting Customer's Purchase Intentions towards Green Products. *Journal of Sociological Research*, 5(1), 273-289.
- Ali, A. & Ahmad, I. (2012). Environmental Friendly Products: Factors that Influence the Green Purchase Intentions of Pakistani Consumers. *PJETS*, 2(1), 84-117.
- Aman, A.H.Lizawati, Harun, Amran and Hussein, Zuhail (2012). The Influence of Environmental Knowledge and Concern on Green Purchase Intention The Role of Attitudes as A Mediating Variable. *British Journal of Arts and Social Sciences*, 7(II), 145-167.
- Anic, Ivan-Damir (2014). Attitudes and Purchasing Behavior of Consumer in Domestic and Foreign Food Retailers in Croatia. Department of microeconomic analysis, organization and management, 28(1), 113-133.
- Anvar, Muntaha and Marike, Venter (2014). Attitudes and Purchase Behaviour of Green Products among Generation Y Consumers in South Africa. *Mediterranean Journal of Social Sciences*, 5(21), 183.
- Al-Swidi, Abdullah and Huque, Sheikh M.R. (2014). The Role of Subjective Norms in Theory of Planned Behavior in The Context of Organic Food Consumption. *British Food Journal*, 116(10), 1561-1580.
- Banytne, J. Brazioniene, L. and Gadeikiene, A. (2010). Investigation of green consumer profile: A case of Lithuanian market of eco-friendly products. *Economics and Management*, 15, 374-384.
- Barber, Nelson, Taylor, David C., and Strick, Sandy (2009). Environmental Knowledge and Attitudes: Influencing the Purchase Decisions of Wine Consumers. *International CHRIE Conference-Refereed Track*, Paper 16.
- Beckford, c.L., Jacobs, c., Williams, N. and Nahdee, R. (2010). Aboriginal Environmental Wisdom, Stewardship, and Sustainability: Lessons from the Walpole Island First Nations, Ontario, Canada. *The Journal of Environmental Education*, 41(4), 239-248.
- Blackwell, R., D'Souza, C., Taghian, M., Minard, P. and Engel, J. (2007). *Consumer Behaviour: An Asia Pacific Approach*, 1<sup>st</sup> edn. Thomson Learning, Melbourne, Australia.



- Bonini, S. and Oppenheim, J. (2008). Cultivating the Green Consumer. *Stanford Social Innovation*. 10TH Review Anniversary. 1–10.
- Chang, Pao-Lung, Lee, Kuei-Chiu and Su, Wun-Hong (2013). The Impact of Environmental Education and Product Cognition on Consumers' Purchase Intention on Lithium Battery-Powered Electrical Motorcycles. *International Journal of Engineering and Innovative Technology*, 3(4).
- Chen, M. (2009). Attitude Towards Organic Foods Among Taiwanese as Related To Health Consciousness, Environmental Attitudes, and The Mediating Effects of A Healthy Lifestyle. *British Food Journal*, 111(2), 165-178.
- Chen, I.Y.L., Chen, N. and Kinshuk 2009. Examining the factors influencing participants' knowledge sharing behavior in virtual learning communities. *Educational Technology Society*, 12(1), 134-148.
- Chen, Tan Booi, and Chai, Lau Teck (2010). Attitude Towards the Environment and Green Products: Consumers' Perspective. *Management Science and Engineering Journal*, 4(2), 27-39.
- Chyong, H.T, Phang, G, Hasan, H. and Buncha, M.R. (2006). Going green: A study of Consumers' Willingness to Pay for Green Products in Kota Kinabalu. *International Journal of Business and Society*, 7(2), 40-54.
- Conraud-Koellner, E. and Rivas-Tovar, L. (2009). Study of Green Behavior with A Focus On Mexican Individuals. *iBusiness*, 1, 124-131.
- D'Souza, C., Taghian, M., and Lamb, P. (2006). An empirical study on the influence of environmental labels on consumers. *Corporate Communications: An International Journal*, 11(2), 162-173.
- Davies, A., Titterton, A.J. and Cochrane, C. (1995). Who Buy Organic Food Products? A Profile of the Purchasers of Organic Food Products in Northern Ireland. *British Food Journal*, 97(10), 17-23.
- Dunlap, R. and Jones, R. (2002). Environmental concern: Conceptual and measurement issues. In *Handbook of environmental sociology*, ed. R. Dunlap and W. Michelson. London: Greenwood.



- Durif, F., Biovin, C. and Julien, C. (2010). In Search of a Green Product Definition. *Innovative Marketing*, 6(1), 25-33.
- Effendi, Ihsan, et al. (2015). Analysis of Consumer Behavior of Organic Food in North Sumatra Province, Indonesia. *Journal of Business and Management*, 4, Issue 1:44-58.
- Figueiredo, Joao Neiva de, Guillen, Mauro F. (2012). Green Products: Perspectives on Innovation and Adoption, Boca Raton: CRC Press Taylor and Francis Group.
- Fishbein, M. and Ajzen, Icek (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. MA, Addison-Wesley.
- Gliem, J.A. and Gliem, R.R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. *Paper presented at Midwest Research to Practice Conference in Adult, Continuing, and Community Education*. Available at:  
<http://www.ssnpstudents.com/wp/wp-content/uploads/2015/02/Gliem-Gliem.pdf>
- Gracia, A., de Magistris, T., and Barreiro-Hurle, J. (2010). Why do we buy organic? Integrating knowledge, attitudes and concerns in a simultaneous equation model for Spanish consumers. Paper presented at the 119th EAAE Seminar 'Sustainability in the Food Sector, Capri, Italy.
- Haryanto, B. and Budiman, S. (2014). The Role of Environmental Knowledge in Moderating the Consumer Behavioral Processes Toward the Green Products (Survey on the Green Product-mind in Indonesian). *Review of Integrative Business and Economics Research*, 4(1), 203-216.
- Hasbullah, Norazlan, Mahajar, Abdul Jumaat, and Salleh,. Mad Ithnin (2014). Extending The Theory of Planned Behavior: Evidence of The Arguments of its Sufficiency. *International Journal of Humanities and Social Science*, 4(14), 101-105.
- Ibragimova, B., Ryan, S.D., Windsor, J.C. and Prybutok, V.R. 2012. Understanding the antecedents of knowledge sharing: an organizational justice perspective. *Informing Science: the International Journal of an Emerging Transdiscipline*, 15, 183-205
- Irianto, Heru (2014). Consumers' Attitude and Intention Towards Organic Food Purchase: An Extension of Theory of Planned Behavior in Gender Perspective. *International Journal of Management, Economics, and Social Sciences*, 4(1), 17-31.



- Ishaswini, Saroj Kumar Datta (2011). Pro-Environmental Concern Influencing Green Buying: A Study on Indian Consumers. *International Journal of Business and Management*, 6(6), 124-133.
- Kaiser, F.G., Wolfing, S. and Fuhrer, U. (1999). Environmental Attitude and Ecological Behaviour. *Journal of Environmental Psychology*, 19,1-19.
- Karatu, Victoria Masi H., Nik Mat, Nik Kamariah (2015). Predictors of Green Purchase Intention in Nigeria : The Mediating Role of Environmental Consciousnes. *American Journal of Economics*, 5(2), 291-302.
- Khraim, Hamza Salim, Al-Jabaly, Sameer M., and Khraim, Aymen S. (2014). The Effect of Perceived Value and Customer Satisfaction on Perceived Price Fairness of Airline Travelers in Jordan. *Journal of Marketing*, 74: 18–31.
- Kim, H.Y. and Chung, J.E. (2011). Consumer Purchase Intention for Organic Personal Care Products. *Journal of Consumer Marketing*, 28(1), 40-47.
- Kotler, P. and Armstrong, G. (2010). *Principles of Marketing*, 13th ed. New Jersey: Prentice Hall.
- Kuang, L.C., Davidson, E. and Yao, L. 2012. A planned behavior-based investigation of knowledge sharing in construction industry. *Proceedings of International Management and Engineering Conference (EMC 2012)*. Available at: [umpire.ump.edu.my/3187/1/Lee\\_EMCC\\_2012.paper.pdf](http://umpire.ump.edu.my/3187/1/Lee_EMCC_2012.paper.pdf)
- Laroche, Michel, Bergeon, Jasmin, Barbaro-Forleo, Guido (2010). Targeting Consumers Who are Willing to Pay More for Environmentally Friendly Products. *Journal of Consumer Marketing*, 18(6), 503-520.
- Laskova, A. (2007). Perceived Consumer Effectiveness and Environmental Concerns. *Proceedings of the 13th Asia Pacific Management Conference*, Melbourne, Australia, pp. 206-209.
- Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence and Planning*, 26(6), 573-586.
- Lin, H. and Lee, G. 2004. Perceptions of senior managers toward knowledge-sharing behavior. *Management Decision*, 42(1), 108-125.





- Ling, Chan Yew (2013). Consumers Purchase Intention of Green Products: An Investigation of the drivers and moderating variable. *Elixir Marketing Management International Journal*, 57A, 14503-14509.
- Luchs, M. G. et al. 2010. The Sustainability Liability: Potential Negative Effects of Ethicality on Product Preference. *Journal of Marketing*, 74, 18–31.
- Magistris, T. and Gracia, A. (2008). The Decision to Buy Organic Food Products in Southern Italy. *British Food Journal*, 110(9), 929-947.
- Mahesh, N.(2013). Consumer's Perceived Value, Attitude and Purchase Intention of Green Products. *Management Insight Journal*, 9(1), 36-43.
- Mahmood, A., Qureshi, M.A. and Shahbaz, Q. 2011. An examination of the quality of tacit knowledge sharing through the theory of reasoned action. *Journal of Quality and Technology Management*, VII(I), 39-55.
- Mostafa, M.M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: The effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31(3), 220–209.
- Nik Abdul Rashid, N.R. (2009). Awareness of Eco-label In Malaysia's Green Marketing Initiative. *International Journal of Business and Management*, 4(8), 132-141.
- Ottman, J.A. (1998). *Green Marketing: Opportunity for Innovation*. Second Edition, BookSurge.
- Pavan, M. P. S. (2010). Green Marketing in India: Emerging Opportunities and Challenges. *Journal of Engineering, Science and Management Education*, 3, 9–14.
- Rahab and Wahyuni, P. 2013. Predicting knowledge sharing intention based on theory of reasoned action framework: an empirical study on higher education institution. *American International Journal of Contemporary Research*, 3(1), 138-147.
- Roberts, J. A. and Bacon D. R.(1997). Ecologically conscious consumer buying. *Journal of Business Research*, 40, 79-89.
- Saeed, Rashid et al. (2013). Measuring Impact of Factors Influencing Purchase Intention Towards Green Product: Sahiwal Clothing Industry Perspective. *World Applied Sciences Journal*, 26(10), 1371-1379.



- Saleki, Z. S., Seyedsaleki, S. M., and Rahimi, M. R. (2012). Organic food purchasing behavior in Iran. *International Journal of Business & Social Science*, 3(13), 278-285.
- Salleh, Musdiana Mohamad et al. (2010). Consumer's Perception and Purchase Intentions Towards Organic Food Products: Exploring Attitude Among Academician. *Canadian Social Science*, 6(6), 119-129.
- Sangkumchaliang, Parichard, and Huang, Wen-Chi (2012). Consumers' Perceptions and Attitudes of Organic Food Products in Northern Thailand. *International Food and Agribusiness Management Review*, 5(1), 87-102.
- Suki, NorazahMohd. (2012). Green Awareness Effects on Consumers' Purchasing Decision: Some Insights From Malaysia. *IJAPS*, 9(2), 49-63.
- Sun, J., and Wilson, V.L. (2008). Assessing General and Specific Attitudes in Human Learning Behaviour: An Activity Perspective and A Multilevel Modeling Approach. *Educational and Psychological Measurement*, 66, 245-261.
- Tanner, C. and Kast, S. W. (2003). Promoting Sustainable Consumption: Determinants of Green Purchases by Swiss Consumers. *Psychology & Marketing*, 20(10), 883-902.
- Tarkiainen, A. and Sundqvist, S. (2005). Subjective Norms, Attitudes and Intentions of Finnish consumers in buying organic food. *British Food Journal*, 107 (11), 808-822.
- Tavakol, M. and Dennick, R. (2011). Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 2, 53-55.
- Teh, P., Yong, C., Chong, C. and Yew, S. 2011. Do the big five personality factors affect knowledge sharing behavior? A study of Malaysian universities. *Malaysian Journal of Library & Information Science*, 16(1), 47-62.
- Teh, P. and Yong, C. 2009. Knowledge sharing in IS personnel: organizational behavior's perspective. *Journal of Computer Information System*, Summer, 11-21.
- Rezai, Golnaz., Teng, Phuah Kit, Mohammed, Zainalabidin, and Shamsudin, Mad Nasir (2013). Consumers' Awareness and Consumption Intention Towards Green Foods. *African Journal of Business Management*, 6(12) 4496-4503.
- Terenggana, Candra Astra, Supit, Henky, and Utami, C. W. (2013). Effect of Value, Consumer Trust and Attitudes Towards Intention Buy Environmental Friendly Air



- Conditioners Product in South Sumatera. *Social Sciences and Humanities*, 4(3), 323-335.
- Tuan, Nguyen Minh (2012). Effects of Service Quality and Price Fairness on Student Satisfaction. *International Journal of Business and Social Science*, 3(19).
- Wilson, E. (2007). A World Consumed by Guilt. *The New York Times*. Retrieved March 2, 2008 from <http://www.nytimes.com>.
- Wu, K., Huang, D., and Teng, Y. (2013). Environmental Concern, Attitudes and Intentions towards Patronage of Green Restaruants. *Life Science Journal*, 10(4), 2329-2340.
- Young, W., Hwang, K., McDonald, S. and Oates, C. J.(2010). Sustainable Consumption: Green Consumer Behaviour When Purchasing Products. *Sustainable Development*, 18, 20–31.
- Zainudin, N. (2013). Attitudes Towards Energy Efficient Product: The Influence of Eco-Literacy and Social Influence. *E-Journal of Integration Knowledge*.

