

Journal of Management Matters

Journal homepage: www.rjt.ac.lk/mgt

Faculty of Management Studies, Rajarata University of Sri Lanka

Factors affecting young consumers' purchase intention of green products: With special reference to undergraduates of the University of Ruhuna

T.S.L.W. Gunawardana* and H.K.D. Thilinika
Department of Marketing, Faculty of Management & Finance,
University of Ruhuna, Sri Lanka.

*Corresponding author: gunawardana@badm.tuh.ac.lk

Abstract

The purpose of this paper is to investigate the factors affecting young consumers' purchase intention of green products in Sri Lanka, due to the lack of studies that deliberate green issues in the Sri Lankan context. This study focuses on three variables (i.e., environmental attitude, environmental knowledge and social influence) that influence on young consumers' purchase intention. The data were collected over a survey technique by conveniently administering structured questionnaires from 150 young consumers in the University of Ruhuna, Sri Lanka to test hypotheses. The analysis was carried out the multiple regression analysis while the results indicated that all three variables have a significant and positive impact on young consumers' purchase intention of green products. Moreover, it suggested that the environmental attitude was the most significant while social influence was the less significant variables towards young consumers' purchase intention. The findings of this study provide new insights to marketers to formulate appropriate strategies for promoting green purchase behavior among young consumers. But, this study evaluates the construct of purchase intention as an expressed intention for green products based on cross-sectional approach rather than actual purchase for such products. Hence, future scholars should adopt a longitudinal approach by focusing on changes in consumers purchase intention.

Keywords: Environmental attitude, environmental knowledge, green marketing, green purchase intention, social influence.

1. Introduction

Unsustainable consumption patterns worldwide lead to serious environmental issues, such as global warming and climate change, which drive people to change their conventional lifestyles (Lai & Cheng, 2016). Because of climate changes in the global environment, environmental

issues have become critical social issues that are increasingly apparent in daily life (Wang, 2014). When the business sector promotes effective green marketing concepts and sustainable marketing plans, consumers are likely to walk the extra mile and pay the premium price to behave in an eco-responsible manner and achieve green consumerism (Lai & Cheng, 2016). Consumers have challenged their growing concern for the environment through the demand for eco-friendly products and this movement of "going green" has expanded worldwide due to intensified awareness of living more healthily (Thøgersen, De Barcellos, Perin, & Zhou, 2015). Furthermore, Wanninayake and Randiwela (2008) reveal that green products have substantial awareness among Sri Lankan consumers and they are willing to pay something more for green products. Then the various companies, now being more environmentally responsible, have developed environment-friendly products and services, generally referred to as green products, to meet the requirements of environment-friendly consumers (Sachdev & Mahna, 2014).

Beginning in the 1970s, a significant amount of research has been conducted on consumer behavior for green products. Many variables including values, beliefs/knowledge, needs and motivations, attitudes, and demographics were shown to drive consumer choice in regards to purchasing environment-friendly products (Bui & Loyola, 2005). The previous studies have used the attitude to examine the motivation towards purchase intention of green products without factoring in the impacts of environmental attitudes and environmental knowledge (Maichum et al., 2016). They have not considered green consumer values such as environmental knowledge and social influence impact to the purchase intention of green products. Numerous studies have examined the purchase intentions of consumers towards green products in developed countries such as Italy, Germany, United Kingdom and United States (Maichum et al., 2016). However, there has been very few studies conducted on green purchasing behavior and researches argued that compared to Western countries, the green marketing studies in Asian countries are relatively less (Lee, 2008). Especially, there only a few studies have addressed green consumer purchase attitudes and behavior in Sri Lanka (Wanninayake & Randiwela, 2008).

The young generation is the future of our society and country, which seems to have an attitude and concept is different when compared to other generations (Kanchanapibul, Lacka, Wang, & Chan, 2014). Wray-Lake, Flanagan, and Osgood (2009) demonstrated that young people are the starting point for a movement of green behavior. Young consumers are the most potential of green consumer group due to they are ready with ideas, knowledge, attitude and green consciousness (Sullivan & Heitmeyer, 2008). Thus, they can understand the complexity of the green market as well (Maichum et al., 2016). Therefore, the study focuses on understanding the views of young people on green behavior is very important as they are the future consumers and representatives of society (Kanchanapibul et al., 2014).

This study adopts a different perspective by focusing on young consumers' purchase intention of green products with special reference to young undergraduates at the University of Ruhuna. The results of this research are useful for produces of various green consumer products and marketing professionals who can use them as a source of competitive advantage in their marketing plans. Additionally, this research is interested in the results to gain a better understanding of consumer behavior to conduct further studies. Therefore, the main objectives of this study to determine whether environmental attitude, environmental knowledge and social influence affect green purchase intention of young consumers in the University of Ruhuna, Sri Lanka.

2. Literature review

2.1 Green marketing

The concept of green marketing is the marketing practice that considers prevention and conservation of the natural environment (Singh, 2014). Due to more pollution in the environment, arisen from industrial sectors manufacturing activities consumers are concern about the environmental problem (Chen, 2011) and willing to purchase environmentally friendly products (Erdil, 2018). Due to consumer pressure regarding environmental issues, companies develop new business models based on green trends (Singh, 2014). Green marketing is considered one of the major trends in modern business (Chen & Chai, 2010). Green marketing can be defined as "the activities taken by firms concerned about environmental problems, by delivering the environmental sound goods or services to create customer's and society's satisfaction" (Chen & Chai, 2010).

According to Peattie (2001), the evolution of green marketing has three phases that are Ecological, Environmental and Sustainable. The green marketing began in Europe in the early 1980s after identified the specific products were being harmful to the earth's atmosphere. During the first stage; the concept of green marketing was integrated and discussed with industrial marketing by the scholar in the ecological stream (Peattie & Crane, 2005). The second stage of green marketing has occurred towards to end of the 1980s. This stage is the period that today's modern green marketing principals have occurred and developed. The thought which is about green marketing is not for only an industry, it applies to all forms of production and consumption industries is the name of this second stage (Durmaz & Yasar, 2016). Further then, Achchuthan and Velnampy (2016) points that, since 2000, the third stage has been evolved, in which, implementation of more advanced technology, legislation for green issues and governmental regulation and incentives were greatly improved and practiced among marketers to regain the consumer confidence.

2.2 Green products and green consumers

Green products have evolved as a result of the growing concerns about global and local pollution levels, global warming, diminishing natural reserves, and overflowing of wastes (Srivastava, 2007). The green products have been proven to have reduced harmful side effects, reduced hazards, reduced toxic substances, reduced health issues, improved recyclability, and improved environmental friendliness (Azevedo, Carvalho, & Machado, 2011). Green products help conserve energy, minimize carbon footprints or the emission of greenhouse gases and don't lead to a lot of toxicity and pollution. The humans all over the world have identified the importance of protecting the environment and using green products, and then the demand for green products has become increasingly higher. According to Maniatis (2015), the economic gains realized improved recyclability helps in reducing waste disposal costs that is one of the benefits to consumers.

In the existing literature, green consumers are who are aware of and interested in environmental issues are called green consumers (Chen & Chai, 2010). According to Renfro (2010) green consumers as the consumers who support a business that operates in environmentally friendly ways. Further, Samarasinghe (2012) defines green consumers are

those who avoid products that are likely to endanger the health of the consumers or others; cause significant damage to the environment during manufacture, use or disposal; consume an unfair amount of energy; cause unnecessary waste; use material derived from threatened species or the environment. In line with the above definitions, it can be concluded that the green consumer is as consumers who purchase, use, disposal products and services which they perceive to have a positive impact on the environment or pro-environmental attitudes.

2.3 Young consumers

The young generation is the future of society and the country, which they seem to have an attitude and concept is considerably different when compared to other generations (Kanchanapibul et al., 2014). Wray-Lake et al. (2009) demonstrated that young people are the starting point for a movement of green behavior. They are characterized as being interested in material consumption, seeing money as a representation of personal success (Chau & Ngai, 2010). They tend to react more flexibly than others, and more ready to accept new and innovative ideas (Lai & Cheng, 2016). Yong buyers tend to search for more information before making an actual purchase and they find that technology can conveniently support their lifestyles (Kanchanapibul et al., 2014). Moreover, they do not only consider the present but are also concerned about the future effect of their present actions, preferring to become lifelong customers of the green market and relative to their level of judgement, the young generation seems to have more ability to reflect on their choice of environmentally-friendly products (Kanchanapibul et al., 2014).

The young consumers are the most powerful consumer group because they have more disposable income than that of any previous generation and the freedom of personal commitment of young consumers appears to encourage them to decide on their selection depending on their affective response (Kanchanapibul et al., 2014). Furthermore, Young consumers constitute a large citizen group globally and have the potential to influence others towards sustainability and environmental protection (Lukman, Essa, Muazu, Bukhari, & Basheer, 2013). A study by Uddin and Khan (2016) reveals that the majority of young consumers from Europe believe that their behavior and attitude towards the environment are significant for protecting the environment. Scholars such as Kanchanapibul et al. (2014) and Lai and Cheng (2016) have also argued that young people are likely to be more concerned with green behavior and there exist differences in their overall environmental behavior (Lee, 2008).

2.4 Green purchase intention

Rashid (2009) describes green purchase intention as the possibility and eagerness of consumers to give priority to green products over traditional products in their purchase decision. It can also be described as an inner desire and willingness of consumers to purchase a less environmentally detrimental product. It positively affects the consumer's decision to buy green products (Usmani, Kumari, Husain, & Jamal, 2015). Chan (2001) defines green purchase as a specific kind of eco-friendly behavior that consumers perform to express their concern to the environment. Purchase intention is a critical factor to predict consumer behavior (Mei, Ling, & Piew, 2012).

Green purchase can be simply defined as an intention to buy service or product which is less or not harmful for the society and environment or internal wish, desire and willingness of the people to buy a less harmful and environmentally friendly product. The intention is a significant predictor of individuals' actual behavior in the future. Green purchase behavior is highly strung on green purchase intention; which can be explained by reasoned action and planned behavior theories (Erdil, 2018). Extensive research has been done on green purchase behavior at the beginning of the 1970s. Many factors were responsible for influencing consumer choice of buying green products including, beliefs, motivations, needs, values, demographics, knowledge and attitudes (Bui & Loyola, 2005). Chan and Lau (2000) tested a model consisting of environmental concern, green purchase intention, environmental knowledge, man-nature orientation and actual purchase behavior. Their results suggested that actual green purchase behavior was dependent on a person's green purchase intention.

2.5 Environmental attitude

Attitude refers to people's feeling, tendencies, evaluation toward the object, idea or concept. People actions and learning are affected by attitude. According to Laroche, Bergeron, and Barbaro (2001) explain attitude, as opposed to knowledge and behavior, is the most significant predictor of consumers' willingness to pay more for ecologically favorable products. Lee (2008) defines environmental attitude as the individuals' value judgement of environmental protection which taps on the individuals' cognitive assessment of the value of the environment protection. Rashid (2009) defines environmental attitude as a learned predisposition to respond consistently favorable or unfavorable manner concerning the environment. According to Trang, Lee, and Han (2019), attitude is a person's consistently favorable or unfavorable evaluations, feelings and tendencies towards an object or idea. Environmental attitudes are found in a person's self-concept and can be defined as the level to which individuals distinguishes themselves to be an integral part of the environment (Zelezny & Schultz, 2000). But always attitude does not become a behavior. Sometimes positive attitude cannot generate the behavior, for example, consumer want to buy green cosmetic but she may not have enough money to buy because green cosmetic is more expensive than chemical one (Pickton & Broderick, 2005). Negative attitude also cannot automatically stop a purchase as can see from the example of cigarette smoking. If the strong attitude overcomes the negative aspect, then that the behavior will occur. It can be explained that the importance of purchase is high, the importance of attitude towards product will be high. When the purchase is a part of habit or routine, the attitude will less influence on purchase intention (Pickton & Broderick, 2005). According to Kotler and Armstrong (2004), attitudes are difficult to change. Therefore, the company should try not to change consumer attitude but the companies should design the message about their product or service which is suitable for their attitude. Tan (2011) and Baker and Ozaki (2008) argue that the marketer can change the consumer's attitude by adapt consumer evaluation through inputting new belief.

2.6 Environmental knowledge

In most cases, knowledge was found to be significantly related to how consumers gather, organize, and evaluate products (Mei et al., 2012). The environmental knowledge as defined

as the ability to understand and evaluate the impact of the ecosystem on the society, and the amount of knowledge about environmental issues (Said, Yahaya, & Ahmadun, 2007). In similar Eles and Sihombing (2017) defied environmental knowledge as the sets of ecological knowledge that individuals have of environmental topics. They believe there are three sources knowledge can be derived. There is ecological ethnocentrism, information about environmental issues and personal experience and environmental insight. Furthermore, Fryxell and Lo (2003) define environmental knowledge as a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystem. Hence, it involves public knowledge about the environment, key relationships concerning environmental facts or impacts, and admiration of the entire organism, and mutual conscientiousness for sustainable development. According to D'souza, Taghian, Lamb, and Peretiatko (2006), environmental knowledge expands in two ways; firstly, consumers have to be educated to be able to understand the impact of a product on the environment and secondly, consumers have to be sure that the product is gone through an environmentally friendly manufacturing process.

2.7 Social influence

Social influence is derived from the concept as the subjective norm in the Theory of Planned Behavior (TPB) (Achchuthan & Velnampy, 2016). Rayan (2001) stated that social dynamic as association among an individual with other people. That means individual shares their beliefs, values, thoughts and attributes with other people that he/she communicated. Lasuin and Ching (2014) further explain that social influence is the changes in a person's attitude and behavior which influenced by another person's action such as persuading and threatening. Karunarathna, Naotunna, and Sachitra (2017) stated that change in the environment can change the mindset and influence the behaviors of people. That means, if the social context is encouraging people to behave in a green manner then people will buy green products. Gupta and Ogden (2009) found that most of the green consumers had a high level of trust in others and they expected that others will also engage in green behavior. Changing in an individual's thoughts, feelings, attitudes, or behaviors that result from interaction with another individual or a group (Ramayah, Lee, & Mohamad, 2010). The social appeal is also found influential in developing their product references (Lee, 2008). So, they intend to buy products that follow the perceptions of society as well as construct their social-identities (Sen & Bhattacharya, 2001).

3. Conceptual framework and hypotheses

The research model proposed in the present study is shown in figure 1. When developing the conceptual framework of the present study, based on the previous literature, measure the positive impact on purchase intention of green products by the three factors (i.e., environmental attitude, environmental knowledge, and social influence). As mentioned, observational data collected prior to this study were important as they led to a research idea and hence provided some direction to the investigation. In this section focuses to develop an initial research model and the hypotheses assumed from the research question. Much care has been exercised to satisfy the criterion of replicability (Kerlinger, 1986).

Factors affecting young consumers' purchase intention of green products: With special reference to undergraduates of the University of Ruhuna

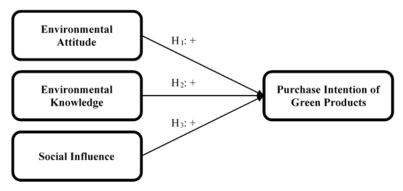


Figure 1 Conceptual framework

3.1 Environmental attitude and purchase intention

According to Armstrong and Kotler (2009), attitudes are a person's consistently favorable or unfavorable evaluations, feelings, and tendencies towards an object or idea. Environmental attitude, which is defined as the individuals' value judgment of environmental protection, which taps the individuals, cognitive assessment of the value of the environmental protection (Lee, 2008). Attitudes are well predictors of pro-environmental behavior (Padel & Foster, 2005). Kotchen and Reiling (2000) found that the people having a positive attitude towards the environment to purchase environmental-friendly products. Similarly, Florenthal and Arling (2011) revealed a significant relationship between green purchase attitudes and buying intentions. Erdil (2018) showed that environmental attitude led to green purchase intentions, especially in developed markets. Uddin and Khan, 2016 provided evidence that young consumers who demonstrate pro-environmental attitude were more likely to behave in a pro-environmental manner. This statement was reversed by Erdil (2018) who indicates that although consumers had a favorable attitude towards green products; it did not ensure the buying of green products. In many other studies (Akehurst, Afonso, & Goncalves, 2012), a gap between attitude and behavior was discovered. Hence the following is hypothesized:

 H_1 - Environmental attitude positively influences on young consumers' purchase intention of green products.

3.2 Environmental knowledge and purchase intention

Environmental knowledge is the ability to understand and evaluate the impact of the ecosystem on the society, and the amount of knowledge about environmental issues (Said et al., 2007). Environmental awareness is considered as knowledge about the facts and general concepts related to the environment and ecosystems (Mostafa, 2007). If the consumers are informed about the environmental problems, their awareness level will rise and so they will build positive attitudes towards green products (Erdil, 2018). Environmental knowledge is linked to positive environmental behavior (Erdil, 2018). According to Jang, Kim, and Bonn (2011), the awareness of green product consumption is essential to create an environmental ethic and it subsequently changes the consumption behavior. Furthermore, Lai and Cheng (2016) suggest that young consumers, who tend to be aware of eco-friendly products and are knowledgeable about environment-related issues, are usually highly educated people.

According to Maichum et al. (2016), knowledge is a key element in the young consumer's decision to purchase green products. In line with this, Erdil (2018) discovered a positive relationship between environmental knowledge and pro-environmental attitudes. Hence the following is hypothesized:

 H_2 - Environmental knowledge positively influences on young consumers' purchase intention of green products.

3.3 Social influence and purchase intention

An individual can be highly influenced by his or her social surrounding including relatives, friends, colleagues and business partners (Han, Hsu, & Sheu, 2010). A social perspective is required to understand green consumption behavior (Peattie, 2010). Previous studies have indicated that social influences, such as subjective norms, exert a positive effect on recycling intentions and intentions to purchase sustainable and environmentally friendly products (Park & Ha, 2012). Ewing (2001) also revealed that social norms significantly motivate environmental friendly behavior. Lee's (2008) study found that social influence is the main determinant of green purchasing behavior. This is due to the characteristics of social groups were people tend to share the same thinking, desires and habits can result in supporting ecofriendly behavior (Zia-Ur-Rehman & Dost, 2013). Studies conducted in developed countries assume that social influence significantly influences green purchase behavior (Costa, Zepeda, & Sirieix, 2014). Young consumers, as a part of a community or a social group, receive and share information, and know what others think for a particular product (Dholakia, Bagozzi, & Pearo, 2004) and evaluate the products based on the comments and opinions of others (Escalas & Bettman, 2005). This way, young consumers form, clearly define and elaborate on their preferences and tastes (Dholakia et al., 2004). Furthermore, social and reference groups, especially peers and other individuals with proximity to consumers have a stronger influence on consumers' green purchase decision-making process (Lee, 2010). Hence the hypothesis is as follows:

 H_3 - Social influence positively influences on young consumers' purchase intention of green products.

4. Study design and methods

4.1 Population, sample and data collection

Population refers to the entire group of people, events or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2010). The scope of this study includes young consumers in Sri Lanka. Because of, the educated younger generation is more ready to accept the new and innovative ideas (Lai & Cheng, 2016) and they are aware of eco-friendly products and are knowledgeable about environment-related issues and should have a sense of responsibility for protecting the environment (Lee, 2008). As educated young consumers, the study has selected undergraduates from the University of Ruhuna, Sri Lanka. Although they are financially supported by their parents, they are regarded as typical consumers for making purchasing decisions and therefore, undergraduate students are one of the target groups for studying purchasing behaviors, such as online shopping and luxury brand purchase (Lai & Cheng, 2016).

Zikmund, Babin, Carr, and Griffin (2012) defined the sample frame as a list of elements from which a sample may be drawn; also called the working population. According to that the sample frame of this study is a registered list of all the undergraduates at the University of Ruhuna. The sample is a subset of the entire population, and inferential statistics is to generalize from the sample to the population (Cooper & Schindler, 2008). In this research, the number of respondents was 150, while a convenience sampling method was applied to select the respondents from the population. The research conducts on 95 percent confidence. The data collection had happened during from May 2020 to July 2020 using the self-administered questionnaire. This study, therefore, uses SPSS to process the data because of sample size is somewhat sufficient. 101 respondents were mail and that was 67.3 percent, 49 were females that was 32.7 percent. 113 (75.3 percent) respondents were recently purchased green products, while 37 (24.7 percent) respondents have frequently purchased the green products. The questionnaire is composed of three parts. The first part of the questionnaire was designed to collect background information, while the second part was designed to operationalize key variables. The third part of the questionnaire asks demographic information about undergraduates. The four study constructs of the study i.e., environmental attitude, environmental knowledge, social influence and purchase intention of purchase intention were operationalized as multi-item constructs. To measure environmental attitude, five items from Chen et al. (2018) were used. Environmental knowledge was measured using six items which were adopted from Jaiswal and Kant (2018), while social influence was measured using four items which were adopted from Chen et al. (2018). To measure green purchase intention of young consumers, five items were adopted from Paul, Modi, and Patel (2016). The questions were developed by using a five-point scale ranging from "1 = strongly disagree" to "5 = strongly agree".

5. Data analysis and results

5.1 Validity and reliability test

Factor analysis can be used to measure the construct validity of the questionnaire. Field (2009) explains that all the variables need to be measured at an interval level to conduct factor analysis. Keiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of Sphericity can be used to decide the appropriateness of factor analysis to test the construct validity. According to Field (2009), KMO of sampling adequacy is used to decide whether the sample size is large enough to conduct the factor analysis and is should be greater than 0.5. When the significant level of Bartlett's test of Sphericity is less than 0.05, results of the factor analysis can be accepted. Table 1 shows the values of KMO and Bartlett's test for independent variables and dependent variable.

Table 1 KMO and Bartlett's test

		Independent	Dependent
		Variables	Variable
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.799	0.753
	Approx. Chi-Square	892.276	275.739
Bartlett's Test of Sphericity	Df	105	10
	Sig.	0.000	0.000

The discriminant validity of the latent variables was tested using Fornell and Larcker (1981) approach. Table 2 shows the discriminant validity of each latent variable. The discriminant validity of the latent variables was tested using Fornell and Larcker's (1981) criterion, which requires that each latent variable's AVE is greater than the latent variable's squared correlation with any other construct in the model. Internal consistency of the items was measured by using Cronbach's Alpha coefficient.

Table 2
Discriminant validity of variable constructs

Latent Variables	1	2	3	4
Environmental Attitude	0.83			
Environmental Knowledge	0.16	0.89		
Social Influence	0.61	0.17	0.78	
Purchase Intention	0.38	0.33	0.40	0.76

Source: Survey results (2020).

Table 3
Reliability statistics

Variable	Number of Items	Cronbach's Alpha
Environmental Attitude	5	0.857
Environmental Knowledge	6	0.833
Social Influence	4	0.618
Green Purchase Intention	5	0.819

Source: Survey results (2020).

Reliability coefficient as Cronbach's Alpha coefficient shows the average correlation among items that include under a variable as in Table 3.

5.2 Testing parametric assumptions

Chan (2004), suggests that normal distribution of the data set, independency, outliers and multicollinearity need to be tested before performing regression analysis. Normality test should be done to check whether the data set follows a normal distribution.

Table 4 Normality test statistics

	N	Skewness		Ku	rtosis
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Environmental attitude	150	-1.888	0.198	5.442	0.394
Environmental knowledge	150	-0.101	0.198	0.514	0.394
Social influence	150	-0.268	0.198	0.312	0.394
Green purchase intention	150	-0.403	0.198	0.611	0.394
Valid N (listwise)	150				

According to the Skewness and Kurtosis test in Table 4, Test of Normality, Skewness values of environmental knowledge, social influence and green purchase intention are near to the zero and also the Skewness and Kurtosis values are in between the more liberal z value range between -3.29 and +3.29 (Hair, William, Barry, & Anderson, 2010). Hence, it can be able to conclude the data of that 3 variables follows a normal distribution. But the test of Normality, Skewness value of environmental attitude is not near to the zero and also the Kurtosis value is not in between the acceptable range. Hence the data of environmental attitude did not follow a normal distribution.

Table 5
Collinearity statistics

Model		Collinearity Statistics		
		Tolerance	VIF	
	Environmental attitude	0.909	1.100	
1	Environmental knowledge	0.761	1.313	
	Social influence	0.817	1.223	

a. Dependent variable: Green purchase intention.

Source: Survey results (2020).

Multicollinearity indicates the interrelationship exists among independent variables in multiple regression. Variance Inflation Factor (VIF) and Tolerance are used to measure the Multicollinearity. If the independent variables consist of the VIF values less than 10 and Tolerance values greater than 0.2, there are no Multicollinearity problems among them. As per the Table 5, the Tolerance values for all variables are greater than 0.2 and also, VIF values are perfectly below 10. Hence, it can be concluded that there are no any Multicollinearity problems among them.

5.3 Correlation analysis

Correlation analysis indicates that the relationship between the independent variables on the dependent variable as in Table 6.

Table 6 Result of correlation analysis

		Green purchase intention
Environmental attitude	Pearson Correlation	0.460**
Environmental attitude	Sig. (2-tailed)	0.000
E	Pearson Correlation	0.468^{**}
Environmental knowledge	Sig. (2-tailed)	0.000
C '1' M-	Pearson Correlation	0.339**
Social influence	Sig. (2-tailed)	0.000
C - 1 ' 4 4'	Pearson Correlation	1
Green purchase intention	Sig. (2-tailed)	

Notes: N=150, **. Correlation is significant at the 0.01 level (2-tailed).

Journal of Management Matters Volume 7 Number 2 December 2020

As per the observations, P - values for all the independent variables are less than the critical P - value of 0.05. The Pearson correlation values indicate that all the independent variables have positive relationships with the dependent variable, because of all the Pearson values are positive.

5.4 Multiple regression analysis

The present study examines the impact of factors (i.e., environmental attitudes, environmental knowledge and social influence) on green purchase intention with young consumers in Sri Lanka. According to the adjusted R Square in Table 7, the green purchase intention is changed 35.2 percent by the independent variables of environmental attitude, environmental knowledge and social influence.

Table 7
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.593 ^a	0.352	0.339	0.41379

a. Predictors: (Constant), Social influence, Environmental attitude, Environmental knowledge. Source: Survey results (2020).

According to Table 8, ANOVA indicates whether the "regression analysis" is suitable or fit for the data while the sig value is 0.000. It can be concluded that; regression model predicts the green purchase intention significantly well.

Table 8 ANOVA

Mode	l	Sum of Squares	df	Mean Square	F	Sig.
	Regression	13.585	3	4.528	26.447	0.000^{b}
1	Residual	24.999	146	0.171		
	Total	38.584	149			

a. Dependent variable: Green purchase intention.

The Coefficient values as shown in Table 9 represents the degree to which extent the dependent variable can be affected by a certain independent variable while other independent variables remain constant.

Table 9
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	0.719	0.383		1.877	0.062
1	Environmental attitude	0.375	0.076	0.347	4.960	0.000
1	Environmental knowledge	0.292	0.075	0.296	3.878	0.000
	Social influence	0.144	0.067	0.159	2.161	0.032

a. Dependent variable: Green purchase intention.

b. Predictors: (Constant), Social influence, Environmental attitude, Environmental knowledge. Source: Survey results (2020).

According to the Table 9, the results reveal that there is a significant and positive effect of environmental attitude on young consumers' purchase intention of green products. This is supported by data ($\beta = 0.375$, t = 4.960, p < 0.000) in harmony with postulated theory, while results show that an environmental knowledge has a positive and statistically significant effect upon young consumers' purchase intention of green products ($\beta = 0.292$, t = 3.878, p < 0.000). There is a positive and statistically significant impact of social influence on young consumers' purchase intention of green products ($\beta = 0.144$, t = 2.161; p < 0.05).

6. Discussion

The main aim of this study is to investigate the factors affecting the young consumers' purchase intention of green products with special reference to young undergraduates at the University of Ruhuna, Sri Lanka. In conclusion, "go green" has become a slogan and being discussed by people from all walks of life. The current study shows that the key to raising green purchase intention among young consumers lies on three factors, which are environmental attitude, environmental knowledge and social influence. In this study all the hypotheses have been accepted, it can be concluded that environmental attitude, environmental knowledge and social influence play a major role in affecting young consumers' purchase intention of green products. Moreover, the results indicate that environmental attitude is the strongest influencing factor on young consumers' purchase intention of green products. And the findings of previous researches are also proved that environmental attitude, environmental knowledge and social influence play a major role in affecting young consumers' purchase intention of green products (Karunarathna et al., 2017; Erdil, 2018). The findings of previous researches also show that the environmental attitude, environmental knowledge and peer pressure positively related to the green purchase intention (Mei et al., 2012; Erdil, 2018). Furthermore, Karunarathna et al. (2017) found that environmental knowledge and social influence has a significant relationship with young consumers' purchase intention of green products. Therefore, the findings from this study provide insights for marketers to help them formulate appropriate strategies for promoting green purchase behavior among young consumers in Sri Lanka. The research findings have provided some insight and feedback to marketers who facing a lot of challenges in encouraging consumers to buy environmentally friendly products. To successfully enhance and redefine this new target market, they need to understand the path that moves the environmental factors to green purchase intention. However, marketers should take note that extant literature from Karunarathna et al. (2017) indicate that environmental attitude is not significant predictor on young consumers' green purchase behaviour. The identification of factors which influence their purchase intention is important to develop effective marketing strategies for eco-friendly goods and services. Factors which increase consumer's likelihood in pro-environmental decision making are important for marketers in designing strategies. Furthermore, Karunarathna et al. (2017), mention that the marketers must practice market segmentation for them to be successful in this competitive business world because, regarding current people lifestyle, eco-friendly products are paid much attention. Sri Lanka suffers due to a great deal of environmental degradation such as water, air and noise pollution and a high level of waste disposal. In comparison with the west, Sri Lanka is at its infant stage of green

living. This study clarified the profile of young consumers to their respective green purchase influences. Furthermore, this study will be beneficial for the retail industry in Sri Lanka as it gives insight into the buying patterns of green consumers.

6.1 Recommendations and future research

The results of this study validate the theoretical framework with the topic under investigation on this subject matter. However, few limitations are noticed, suggesting some remarks in the possible avenues for future research in the context of green purchase intention. First, the study is set in the context of young consumers at the University of Ruhuna, Sri Lanka. Hence, the ability to generalize the results to young consumers may be restricted. Further studies are needed to test the proposed factors from other universities and the other rest of young consumers excluding undergraduates. Furthermore, this study focalizes on young consumers in Sri Lankan platform proposed conceptual model also might be applied among general consumers to predict the green purchase intention. Next, this study evaluates the construct of purchase intention as an expressed intention for green products based on cross-sectional approach rather than actual purchase for such products. Hence, future scholars should adopt a longitudinal approach in their studies by focusing on changes in consumers purchase intention. Further, researches can develop new models based on this conceptual framework and past literature findings by using many other independent variables with dimensions that effect on young consumers' purchase intention of green products. Besides, future researches can test the other aspects in the demographic profile such as marital status to determine whether there is a significant difference between demographic and young consumers' green purchase intention or not. By doing this, the result can be more accurate by including youth from different states in the future. The hypotheses have tested through empirical data and analysis done with IBM SPSS determinant of statistics software, further different statistical software's and techniques can be used for the analysis of data and have an opportunity to compare analysis with demographic factors, etc.

References

- Achchuthan, S., & Velnampy, T. (2016). A quest for green consumerism in Sri Lankan context: An application of comprehensive model. *Asian Journal of Empirical Research*, 6 (3), 59-76.
- Akehurst, G., Afonso, C., & Goncalves, H. M. (2012). Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management Decision*, 50 (5), 972-988.
- Armstrong, G. & Kotler, P. (2009). *Principles of Marketing: A Global Perspective*. Prentice Hall, NJ.
- Azevedo, S., Carvalho, H., & Machado, V. (2011). The influence of green practices on supply chain performance: A case study approach. *Transportation Research Part E.* 47 (6), 850-871.

- Baker, J. P. & Ozaki, R. (2008). Pro-environmental products: marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, 25 (5), 281-293.
- Bui, M. H., & Loyola. (2005). Environmental Marketing: A Model of Consumer Behavior. Proceedings of the Annual Meeting of the Association of Collegiate Marketing Education.
- Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & Marketing*, 18 (4), 389-413.
- Chan, R. Y., & Lau, L. B. (2000). Antecedents of green purchase: a survey in China. *Journal of Consumer Marketing*, 17 (4), 338-357.
- Chan, Y. L. (2004). Performance measurement and adoption of balanced scorecards: A survey of municipal governments in the USA and Canada. *International Journal of Public Sector Management*, 17 (3), 204-221.
- Chau, V. S. & Ngai, L.W.L.C. (2010). The youth market for internet banking services: perceptions, attitude and behaviour. *Journal of Services Marketing*, 24 (1), 42-60.
- Chen, T.B. & Chai, L.T. (2010). Attitude towards the environment and Green Products: Consumers' perspective. *Management Science and Engineering*, 4 (2), 27-39.
- Chen, C.-C., Chen, C.-W., & Tung, Y.-C. (2018). Exploring the consumer behavior of intention to purchase green products in belt and road countries: An empirical analysis. Sustainability, 10, 854-872.
- Cooper, R. D., & Schindler, S. P. (2008). Business Research Methods (12th ed.).
- Costa, S., Zepeda, L., & Sirieix, L. (2014). Exploring the social value of organic food: a qualitative study in France. *International Journal of Consumer Studies*, 38, 228-237.
- Dholakia, U.M., Bagozzi, R.P. & Pearo, L.K. (2004). A social influence model of consumer participation in network- and small-group-based virtual communities. *International Journal of Research in Marketing*, 21 (3), 241-263.
- D'souza, C., Taghian, M., Lamb, P., & Peretiatko, R. (2007). Green decisions: demographics and consumer understanding of environmental labels. International *Journal of Consumer Studies*, 31 (4), 371-376.
- Durmaz, Y., & Yasar, H. V. (2016). Green Marketing and Benefits to Business. *Business and Management Studies*, 2 (2), 64-71.
- Eles, S. F., & Sihombing, S. O. (2017). Predicting green purchase intention of generation y:

 An empirical study in Indonesia. 3rd Parahyangan International Accounting & Business Conference.
- Erdil, M. (2018). Understanding the drivers of generation y consumers' green purchase intention: price sensitivity as a moderating variable. *Journal of Business, Economics and Finance*, 7 (1), 89-100.

- Escalas, J. E., & Bettman, J. R. (2005). Self-Construal, Reference Groups, and Brand Meaning. *Journal of Consumer Research*, 32 (3), 378-389.
- Ewing, G. (2001). Altruistic, Egoistic, and Normative Effects on Curbside Recycling. *Environment and Behaviour*, 33 (6), 733-860.
- Florenthal, B., & Arling, P. (2011). Do green lifestyle consumers appreciate low involvement green products? *Scholarships and Professional Work*, Business 222.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.
- Fryxell, G. E. & Lo, C. W.H. (2003). The Influence of Environmental Knowledge and Values on Managerial Behaviours on Behalf of the Environment: An Empirical Examination of Managers in China. *Journal of Business Ethics*, 46, 45-69.
- Gupta, S. & Ogden, D.T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26 (6), 376-391.
- Han, H., Hsu, L.-T., & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31, 325-334.
- Hair, J.F., William C. B., Barry J. B. and Anderson, R.E. (2010). *Multivariate Data Analysis*, Englewood Cliffs, NJ: Prentice Hall.
- Jaiswal, D. & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60-69.
- Jang, Y. J., Kim, W. G. & Bonn, M. A. (2011). Generation Y consumers' selection attributes and behavioral intentions concerning green restaurants. *International Journal of Hospitality Management*, 30 (4), 803-811.
- Kanchanapibul, M., Lacka, E., Wang, X. & Chan, H.K. (2014). An empirical investigation of green purchase behavior among the young generation. *Journal of Cleaner Production*, 66 (1), 528-536.
- Karunarathna, W., Naotunna, S., & Sachitra, K. (2017). Factors Affect to Green Products Purchase Behavior of Young Educated Consumers in Sri Lanka. *Journal of Scientific Research & Reports*, 13 (2), 1-12.
- Kerlinger, F. N. (1986). Fundamentals of behavioral research. *New York: Holt, Rinehart, Winston*.
- Kotchen, M. J., & Reiling, S. D. (2000). Environmental attitudes, motivations, and contingent valuation of nonuse values: a case study involving endangered species. *Ecological Economics*, 32 (1), 93-107.
- Kotler, P., & Armstrong, G. (2004). Principles of Marketing. Prentice-Hall, NJ.

- Lai, C. K., & Cheng, E. W. (2016). Green purchase behavior of undergraduate students in Hong Kong. *The Social Science Journal*, 53, 67-76.
- Laroche, M., Bergeron, J. & Barbaro, F, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18 (6), 503-520.
- Lasuin, C. A., & Ching, N. Y. (2014). Factors Influencing Green Purchase Intention among university students. *Malaysian Journal of Business and Economics*, 01 (2), 1-14.
- Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing Intelligence & Planning*, 26 (6), 573-586.
- Lee, K. (2010). The Green Purchase Behavior of Hong Kong Young Consumers: The Role of Peer Influence, Local Environmental Involvement, and Concrete Environmental Knowledge. *Journal of International Consumer Marketing*, 23 (1), 21-44.
- Lukman, S., Essa, M., Muazu, N., Bukhari, A., & Basheer, C. (2013). Adsorption and desorption of heavy metals into natural clay material: influence of initial pH. *Journal of Environmental Science and Technology*, 6 (1), 1-15.
- Maichum, K., Parichatnon, S., & Peng, K.-C. (2016). Application of the Extended Theory of Planned Behavior Model to Investigate Purchase Intention of Green Products among Thai Consumers. *Sustainability*, 8 (10), 1077-1099.
- Maniatis, P. (2015). Investigating factors influencing consumer decision-making while choosing green products. *Journal of Cleaner Production*, 132 (20), 215-228.
- Mei, O.J., Ling, K.C. & Piew, T.H. (2012). The Antecedents of Green Purchase Intention among Malaysian Consumers. *Asian Social Science*, 8 (13), 248-263.
- 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, 220-229.
- Padel, S., & Foster, C. (2005). Exploring the gap between attitudes and behavior. *British Food Journal*, 107 (8), 606-625.
- Park, J., & Ha, S. (2012). Understanding pro-environmental behavior: A comparison of sustainable consumers and apathetic consumers. *International Journal of Retail & Distribution Management*, 40 (5), 388-403.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.
- Peattie, K., & Crane, A. (2005). Green marketing: legend, myth, farce or prophecy? *Qualitative Market Research*, 8 (4), 357-370.
- Peattie, K. (2001). Towards Sustainability: The Third Age of Green Marketing Source. *The Marketing Review*, 2, 129-146.

- Peattie, K. (2010). Green Consumption: Behavior and Norms. *Annual Review of Environment and Resources*, 35, 195-228.
- Pickton, D., & Broderick, A. (2005). *Integrated Marketing Communications*. Prentice-Hall, England.
- Ramayah, T., Lee, J. W., & Mohamad, O. (2010). Green product purchase intention: some insights from a developing country. *Resources, Conservation and Recycling*, 54 (12), 1419-1427.
- Rashid, N. R. (2009). Awareness of Eco-label in Malaysia's Green Marketing Initiative. *International Journal of Business and Management*. 4 (8), 132-141.
- Renfro, L. A. (2010). Green business operations and green marketing. *Gatton Student Research Publication*, 2 (2).
- Sachdev, S., & Mahna, V. (2014). Consumer Perception Regarding Eco-Friendly Fast Moving Consumer Goods in India. *International Journal of Engineering, Business and Enterprise Applications (IJEBEA)*, 14, 40-43.
- Said, A. M., Yahaya, N., & Ahmadun, F.R. (2007). Environmental comprehension and participation of Malaysian secondary school students. *Journal Environmental Education Research*, 13 (1), 17-31.
- Samarasinghe, R. (2012). Is social psychological models sufficient: empirical research gaps for understanding green consumer attitudinal behaviour? *International Journal of Advanced Research in Management and Social Science*. 1 (4), 28-54.
- Sekaran, U., & Bougie, R. (2016). Research Methods For Business: A Skill-Building Approach, 7th Edition.
- Sen, S., & Bhattacharya, C. (2001). Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, 38 (2).
- Srivastava, S. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*. 9 (1), 53-80.
- Sullivan, P. & Heitmeyer, J. (2008). Looking at Gen Y shopping preferences and intentions: exploring the role of experience and apparel involvement. *International Journal of Consumer Studies*, 32 (3), 285-295.
- Tan, B.C. (2011). The Roles of Knowledge, Threat, and PCE on Green purchase behaviour. *International Journal of Business and Management*, 6 (12), 14-27.
- Thøgersen, J., de Barcellos, M.D., Perin, M.G. & Zhou, Y. (2015). Consumer buying motives and attitudes towards organic food in two emerging markets: China and Brazil. *International Marketing Review*, 32 (3/4), 389-413.
- Trang, H. L., Lee, J.-S., & Han, H. (2019). How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam. *Journal of Travel & Tourism Marketing*, 36 (1), 14-28.

- Factors affecting young consumers' purchase intention of green products: With special reference to undergraduates of the University of Ruhuna
- Uddin, S. F., & Khan, M. N. (2016). Green purchasing behaviour of young Indian consumers: An exploratory study. *Global Business Review*, 17 (6).
- Usmani, S., Kumari, K., Husain, J. & Jamal, S. (2015). Consumer's perception and purchase intentions towards green products: exploring the attitude among Pakistani consumers. Proceedings of SOCIOInT15 2nd International Conference on Education, Social Sciences and Humanities.
- Wang. (2014). Consumer characteristics and social influence factors on green purchasing intentions. *Marketing Intelligence & Planning*, 32 (7), 738-753.
- Wanninayake, W., & Randiwela, P. (2008). Consumer Attractiveness Towards Green Products of FMCG Sector: An Empirical Study. 2008 Oxford Business & Economics Conference Program.
- Wray-Lake, L., Flanagan, C.A. & Osgood, D.W. (2009). Examining Trends in Adolescent Environmental Attitudes, Beliefs and Behaviors across Three Decades. *Environment and Behavior*, 42 (01).
- Zelezny, L. C., & Schultz, P. W. (2000). Promoting Environmentalism. *Journal of Social Issues*, 56 (3), 365-371.
- Zia-Ur-Rehman, & Dost, M. K. (2013). Conceptualizing Green Purchase Intention in Emerging Markets: An Empirical Analysis on Pakistan. The 2013 WEI International Academic Conference Proceedings, Istanbul, Turkey.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2009). Business Research Methods, 8th Edition.