

## The Factors affecting Young Consumers' Purchase Intention of Green Products

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### 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 though environmental disputes increasingly affect every side of human life. Moreover, based on the prior researches, this study focuses on three variables that influence on young consumers' purchase intention of green products such as environmental attitude, environmental knowledge and social influence. Three hypotheses were developed based on the constructed conceptual framework derived from the marketing and consumer behavior literature. The data were collected over a survey technique by conveniently administering structured questionnaires from 150 young consumers in Sri Lanka. First, the analysis was carried out the factor analysis to explore the significance of influencing factors of young consumers' purchase intention, and multiple regression analysis was performed to explore the factors that influence on young consumers' purchase intention of green products. The results of the regression analysis indicated that all three variables (i.e., environmental attitude, environmental knowledge and social influence) have a significant and positive impact on young consumers' purchase intention of green products in Sri Lanka. Moreover, it suggested that the environmental attitude variable 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 in Sri Lanka. Moreover, the study unveiled that marketers need to understand the path that moves the environmental factors to green purchase intention to successfully enhance and redefine the new target markets. The most significant precursor which affects the green purchase intention of Sri Lankan young consumers is environmental attitude followed by environmental knowledge and social influence. 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 in their studies by focusing on changes in consumers purchase intention.

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

## 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). How consumers choose goods and services have both direct and indirect effects on the environment and their collective well-being (Gruber & Schlegelmilch, 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 (Thogersen *et al.*, 2015). Furthermore, Wanninayake & 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 as green products, to meet the requirements of environment-friendly consumers (Sachdev & Mahna, 2014).

However, producers and marketers have not succeeded in selling green products, although remarkable growth rate among these consumers, because of environmentally concerned consumers’ fluctuating preference towards green products (Maichum *et al.*, 2017). According to Lin & Huang (2012), understanding of consumer attitudes and motivation would help producers, marketers and policymakers understand the habits and behaviors of consumers. Thus, to solve these problems, Barber (2010) suggested that the various scholars should study and investigate the variables that influence on attitude and purchase intentions of consumers towards green products.

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 consciousness and environmental knowledge (Maichum *et al.*, 2017). Environmental consciousness and environmental knowledge are important factors influencing the

purchasing decision for green products (Maichum *et al.*, 2016). 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.*, 2017). 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 *et al.*, 2014). Wray-Lake *et al.*, (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.*, 2017). Therefore, 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 producers 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 Sri Lanka.

## **LITERATURE REVIEW**

### **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 on the

basis of green trends (Singh, 2014). Green marketing is considered one of the major trends in modern business (Chen & Chai, 2010). There are several trends in sustainable marketing practices; in modern business, they try to use green marketing as one of the major trends. Environmental marketing, more popularly known as green marketing can be defined as the effort by a company to design, promote, price and distribute products in a manner which promotes environmental protection (Polonsky, 2011). And also 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, p. 29). Other definitions of green marketing as proposed by marketing scholars include social marketing, ecological marketing or environmental marketing. Chen & Chai (2010) proposed a green marketing strategy by firms through positioning the environmental benefits of green products to consumers’ mindset to influence their purchasing decision. According to Welford (2000) green marketing is the management process responsible for identifying, anticipating and satisfying the requirements of customers and society profitably and sustainably. Furthermore, the term green marketing can be used in consumer goods, industrial goods and even services (Morel & Kwakye, 2012).

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. As a result, there were introduced products that were less damaging to the environment called “green” products. Initially, the decade of the late 1980s was keyed and marked as the first stage of green marketing, 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 & 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 practised among marketers to regain the consumer confidence. Cornin *et al.*, (2010) advocate the scholars in the field of marketing to investigate the studies on green performance, green strategies and green purchase behavior or green consumerism.

## **Green products and green consumers**

Green products have a less environmental impact and are less harmful to human health. 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 global pollution is one of the serious problems affecting all of the living things in our world today. Because of human activities, nature is being destroyed fast. Humans impact the environment in several ways. There are including some common effects such as decreased water quality, air pollution, and depletion of natural resources. Some of these directly effect to the environment and others are secondary effects that are also the part of human's action and reactions.

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 *et al.*, 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. Some consumers are very environmentally friendly and they are most concern about the environmental issues that are happening from human activities and we can call them as green consumers. These green consumers usually organized petitions, boycotted manufactures and retailers and actively promote the preservation of the planet (Shaikh, 2011). According to Chen & Chai (2010) reported that consumers accepted green products when their primary need for performance, quality,

convenience, and affordability were met, and when they understood how a green product could help to solve environmental problems.

### **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). Young 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 personal 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 *et al.*, 2013). A study by Uddin & 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 & 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).

Some studies have revealed a weak attitude-behavior relationship depicting the environmental attitude of consumers has minimal effect on their pro-environmental behavior (Meneses & Palacio, 2006), while others have reported that a strong relationship exists between environmental attitude and actual conversion of attitude into pro-environmental behavior (Uddin & Khan, 2016). Meinhold & Malkus (2005) provided evidence that those young consumers who demonstrate pro-environmental attitude were more likely to behave in a pro-environmental manner. Furthermore, Lai & Cheng (2016) suggest that consumers, who tend to be aware of eco-friendly products and are

knowledgeable about environment-related issues, are usually highly educated people. Students at the undergraduate level are referred to as young and highly educated. These young adults usually make their buying decisions without consulting their parents (Brougham *et al.*, 2010). As purchasing green products has become an effective solution for Lessing the burden on the environment due to human activities in product production and consumption (Lai & Cheng, 2016), research investigating factors affecting undergraduate students' green purchase behaviors is worthy of pursuit (Lai & Cheng, 2016).

### **Green purchase intention**

The society and public noticed more seriously about environmental issues creating more pollution in our environment, arisen from the industrial sector's manufacturing activities (Chen, 2011). People are getting much aware of the environmental problems, many customers have environmental concerns and they are conscious enough to buy less destructive and environmental-friendly products (Erdil, 2018). 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 *et al.*, 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 *et al.*, 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 & 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. Erdil (2018) state that behavior is an inevitable outcome of intention, and behavioral intention results from both attitudes and subjective norms that are specified by beliefs. The green purchase intention of consumers is like a representative for their real purchase behavior (Ramayah *et al.*, 2010). The

green purchase intention of the consumer positively affects the probability of a consumer's actual purchase decision to buy green products (Chen, 2013). Besides, Lai & Cheng (2016) found that consumers' expressed willingness is more effective than other behavioral factors to capture consumers' psyche for green purchase. However, there have been very few studies conducted on green purchasing behavior and the green marketing studies in Asian countries are relatively less in comparing to Western countries (Lee, 2008). Thus, it is important to understand the green purchase behavior particularly the purchase intention in the context of Sri Lankan consumers.

### **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 *et al.*, (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 *et al.*, 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). In other word, attitudes affect consumer behavior (Baker & Ozaki, 2008). That is the reason why many marketers try to change consumer attitude. 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 & 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. Baker & Ozaki (2008) argue that the marketer can change the consumer's attitude by adapt consumer evaluation through inputting new belief.



## **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 *et al.*, 2007). In similar Eles & Sihombing (2017) defined 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 & 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, an admiration of the entire organism, and mutual conscientiousness for sustainable development. According to D'Souza *et al.*, (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.

The measure of environmental knowledge can be evaluated with the help of two knowledge mechanism: subjective and objective measure (Tan, 2011). The subjective measure of knowledge is based on one's perception or self-assessment of what and how much an individual aware of the green phenomenon, known as abstract knowledge or perceived environmental knowledge. On the hand, objective measure of knowledge is based on factual knowledge or concrete behavioral knowledge (Tan, 2011). Typically refers to "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems" (Fryxell & Lo, 2003, p. 45). Similarly, Laroche *et al.*, (2001) defined environmental knowledge as one's ability to identify or define some ecologically-related symbols, concepts, and behavior.

## **Social influence**

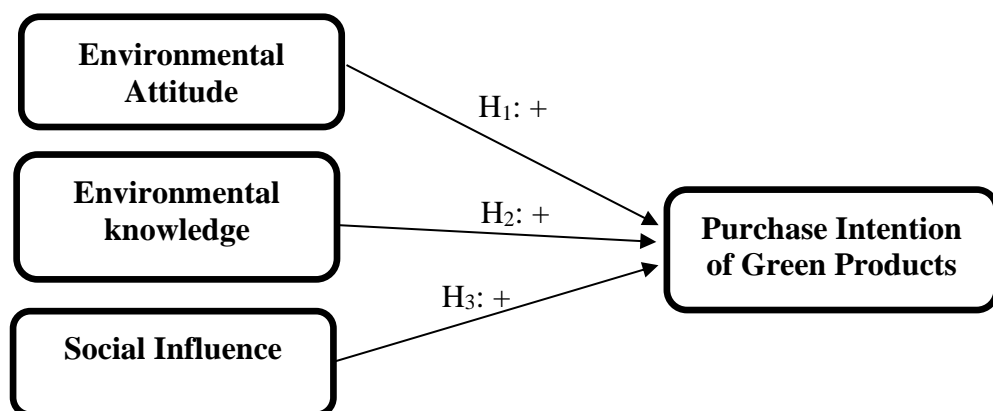
Social influence is derived from the concept as the subjective norm in the theory of planned behavior (TPB) (Achchuthan & Velnampy, 2016). Rayan (2001) stated that social dynamic as association among an individual with other people. That means individual shares their beliefs, values, thoughts and attributes with other people that he/she communicated. Lasuin & 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. Karunaratna *et al.*, (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 & 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 *et al.*, 2010). For instance, some people might throw rubbish in bins when other people are around them but it would not be happening otherwise. An individual can be highly influenced by his or her social surrounding including relatives, friends, colleagues and business partners (Han *et al.*, 2010). There are different perspectives related to social influence in literature. Consumers develop and realize the importance of products when they interact with others and gather related information (Lasuin & Ching, 2014). 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 *et al.*, 2004) and evaluate the products based on the comments and opinions of others (Escalas & Bettman, 2005). This way, they form, clearly define and elaborate on their preferences and tastes (Dholakia *et al.*, 2004). 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).

### CONCEPTUAL FRAMEWORK AND HYPOTHESES

The research model proposed in the present study is shown in figure 1. Theoretical foundations for the current model are based on the literature reviews. 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). The result is a fairly detailed measurement and data collection sections making it possible for others to reproduce the research, to reanalyze the data, and to judge the adequacy of the methods and the data collection.



*Figure 1: Conceptual Framework*

When developing the conceptual framework of the present study, based on the previous literature, measure the positive or negative 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.

### **Environmental Attitude and Purchase Intention**

According to Armstrong & 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). Attitude characterizes consumer likes and dislikes and therefore affects purchase decisions (Erdil, 2018). Attitudes are well predictors of pro-environmental behavior (Padel & Foster, 2005). Kotchen & Reiling (2000) found that the people having a positive attitude towards the environment to purchase environmental-friendly products. Similarly, Florenthal & Arling (2011) revealed a significant relationship between green purchase attitudes and buying intentions. In study conduct in Egypt, consumers' attitude towards green products influenced green purchase intentions and behaviour (Mostafa, 2007). Erdil (2018) showed that environmental attitude led to green purchase intentions, especially in developed markets. 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, a gap between attitude and behavior was discovered, although it was anticipated that there would be a positive relationship between environmental attitude and green purchase intention (Akehurst *et al.*, 2012). Hence the following is hypothesized:

**H<sub>1</sub>** - *Environmental attitude positively influences on young consumers' purchase intention of green products.*

### **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 *et al.*, (2011), the awareness of green product consumption is essential to create an environmental ethic and it subsequently changes the consumption behavior. The more knowledge people have about green behavior practices, the more they will act positively (Erdil, 2018). Furthermore, Erdil (2018) discovered a positive relationship between environmental knowledge and pro-environmental attitudes. According to Maichum *et al.*, (2016), knowledge is a key element in the consumer's decision to purchase green products. In this way, there is a positive relationship between environmental knowledge and purchase intention towards green products (Wang *et al.*, 2014). Hence the following is hypothesized:

**H<sub>2</sub>** - *Environmental knowledge positively influences on young consumers' purchase intention of green products.*

### **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 *et al.*, 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 where people tend to share the same thinking, desires and habits can result in supporting eco-friendly behavior (Zia-Ur-Rehman & Dost, 2013). Studies conducted in developed countries assume that social influence significantly influences green purchase behavior (Costa *et al.*, 2014). 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<sub>3</sub>** - *Social influence positively influences on young consumers' purchase intention of green products.*

## **STUDY DESIGN AND METHODS**

### **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 state universities, 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 *et al.*, (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 list of all the university students in Sri Lanka such as undergraduates at the University of Ruhuna, Colombo, Jayawardhenapura, Moratuwa, Peradeniya, Kelaniya, Eastern, Southern Eastern, Rajarata, Sabaragamuwa, Wayamba, Uva Wellassa, Jaffna, the visual and performing Arts and Open University. The sample is a subset of the entire population, and inferential statistics is to generalize from the sample to the population (Cooper & Schindler, 2008). According to those result, the researcher selected undergraduates at the University of Ruhuna as the sample out of the university undergraduates in Sri Lanka. In this research, the number of respondents was 150, while a simple random sampling method was applied to select the respondents from the population. The research conducts on 95% confidence.

The data collection had happened during from May 2020 to July 2020 using the self-administered questionnaire. The achieved sample consists of 150 questioners, while all of them were usable. This study, therefore, uses PLS to process the data because of sample size is somewhat sufficient. Demographic data analysis has done through the SPSS and 101 respondents' were mail and that was 67.3%, 49 were females that was 32.7%. 113 (75.3%) respondents were recently purchased green products, while 37 (24.7%) 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 & 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 *et al.*, (2016). The questions were developed by using a five-point scale ranging from “1= strongly disagree” to “5= strongly agree”.

## DATA ANALYSIS AND RESULTS

### 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*

	<b>Independent Variables</b>	<b>Dependent Variable</b>
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.799	.753
Approx. Chi-Square	892.276	275.739
Bartlett's Test of Sphericity		
df	105	10
Sig.	.000	.000

Source: Survey Results (2020)

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*

<b>Latent Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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)

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

*Table 3: Reliability statistics*

<b>Variable</b>	<b>Number of Items</b>	<b>Cronbach's Alpha</b>
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)

### **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		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Environmental attitude	150	-1.888	.198	5.442	.394
Environmental knowledge	150	-.101	.198	.514	.394
Social influence	150	-.268	.198	.312	.394
Green purchase intention	150	-.403	.198	.611	.394
Valid N (listwise)	150				

Source: Survey Results (2020)

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 Kurtosis values are in between the acceptable range of +2 to -2. 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. Moreover, Durbin – Watson estimate can be used to test the independence of the data point. It ranges from 0 – 4 and value near to 0 indicates a strong positive relationship and near to 4 indicates a strong negative relationship. The value is near to 2 shows that data points are independent (Chan, 2004). Since the value of Durbin – Watson estimates in this study is 2.094 indicates that the independence assumption is not violated. 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.

Table 5: Collinearity statistics

	Model	Collinearity Statistics	
		Tolerance	VIF
	Environmental attitude	.909	1.100
1	Environmental knowledge	.761	1.313
	Social influence	.817	1.223

a. Dependent Variable: Green purchase intention

Source: Survey Results (2020)

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.

### Multiple Correlation test

Multiple correlation analysis indicates that the relationship between the independent variables on the dependent variable as in table 6.

Table 6: Correlations

		Green purchase intention
	Pearson Correlation	.460**
Environmental attitude	Sig. (2-tailed)	.000
	N	150
	Pearson Correlation	.468**
Environmental knowledge	Sig. (2-tailed)	.000
	N	150

	Pearson Correlation	.339**
Social influence	Sig. (2-tailed)	.000
	N	150
	Pearson Correlation	1
Green purchase intention	Sig. (2-tailed)	
	N	150

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Results (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.

### 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.

*Table 7: Model summary*

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.593 <sup>a</sup>	.352	.339	.41379

a. Predictors: (Constant), Social influence, Environmental attitude, Environmental knowledge

Source: Survey Results (2020)

According to the adjusted R Square in table 7, the green purchase intention is changed 35.2% by the independent variables of environmental attitude, environmental knowledge and social influence.

Table 8: ANOVA

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>	
1	Regression	13.585	3	4.528	26.447	.000 <sup>b</sup>
	Residual	24.999	146	.171		
	Total	38.584	149			

a. Dependent Variable: Green purchase intention

b. 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. 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

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>	
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>			
	(Constant)	.719	.383			
1	Environmental attitude	.375	.076	.347	4.960	.000
	Environmental knowledge	.292	.075	.296	3.878	.000
	Social influence	.144	.067	.159	2.161	.032

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a. Dependent Variable: Green purchase intention

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 ( $\beta = 0.144$ ,  $t = 2.161$ ;  $p < 0.05$ ).

## 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 Karunaratna *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, Karunaratna *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.

## **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.

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