Journal of Advanced Research in Applied Sciences and Engineering Technology

Journal homepage:
https://semarakilmu.com.my/journals/index.php/applied_sciences_eng_tech/index
ISSN: 2462-1943

Issues and Challenges in Cultivating Environmentally Preferred Purchasing Among Young Generation

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ARTICLE INFO

Article history:
Received 26 September 2022
Received in revised form 12 November 2022
Accepted 15 November 2022
Available online 30 November 2022

Keywords:
Green purchasing; waste reduction; green product; environmental sustainability; climate change

ABSTRACT

Purchase and use of environmentally preferable product can have a profound impact to improved ability to meet existing environmental sustainability goals. This article presents a study which examine the issues and challenges in cultivating environmentally preferred purchasing (EPP) among young generation. A survey has been conducted in which the respondents are staff and students of one of public university in Malaysia. A set of questionnaires was used for data collection of the study. Data from 324 respondents was analyzed using a descriptive and inferential analysis in fulfilling the research objectives. The study found that the factors which have significant effect on the EPP practices are the awareness, promotion, knowledge and attitudes. The findings of this study provide a great foundation for a better understanding of EPP practice among the Malaysian, particularly in the context of the educated young generation. The discoveries of this study also have a noticeable implication, especially for the government to increase the awareness and other practitioners to expand the values and promotion for green product and services.

1. Introduction

The rise of environmental awareness has shifted the conventional supply chain activities globally to incorporate a sustainable agenda. Along with Sustainable Development Goals (SDGs) 12 of the 2030, the mission to attain sustainable consumption and production that protect the environment urges all, especially corporate organizations, to produce environmentally friendly products. The product must meet the needs and wants of the consumer in order for it to be acceptable in the market [1-2]. Companies start to adopt sustainable practices in their business operation such as reduce carbon emissions, use sustainable materials to make products, use procedures to minimize the use of raw materials, water and energy, and find the methods to utilize the resources in renewable and eco-friendly ways. Some eco-minded entrepreneurs adopted forward and reverse

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https://doi.org/10.37934/araset.28.3.5767

logistics to achieve balance between economic gains and environmental impacts generating value from used or returned goods rather than purchasing new raw materials [2].

In actual fact, customers are those who ultimately access the value of eco -friendly products. They, especially the younger generation can influence innovation in product design, green delivery, and the role of communication [3]. Although various eco-friendly products have been produced and are in the market, the extent to which customers in this country are concerned in buying eco-friendly products to create market demand is still in doubt. Therefore, encouraging consumers to choose environmental products is an important issue that needs to be addressed in achieving environmental goals. The youth are consumers between 15 and 30 years [4] while some perceives the youth cohort to be between 16 and 24 years [5]. Young consumers constitute a large citizen group globally and have potential to influence others towards sustainability and environmental protection [6-8].

According to Muralidharan and Xue [9], the young consumers, or millennials are understudied segment of the sustainable market. Despite their keen interest in green lifestyle, there are also critics that millennials often fail to translate their attitude into actual pro-environmental behaviour, materialistic and self-expressive due to increasing social interaction and social inclusion [10-11]. Above and beyond, they are the one who withstand the affliction of the past and current negligence towards the environment. Hence, it is relevant to ask question 'what are the issues and challenges that need to be considered in order to cultivate the environmentally preferred purchasing (EPP) among the young generation?' This study aims to explore various issues and challenges in cultivating EPP practices among young generation in Malaysia.

1.1 Environmental Preferred Purchasing (EPP)

Environmental preferred purchasing (EPP) or green purchasing is responsible purchasing product or services that have worthy effect on human health and the environment going beyond price and volume. EPP is adding environmental aspects to price and performance criteria when making purchasing decisions. The ultimate goal is to reduce the environmental impacts of sourcing and to increase resource efficiency. The EPP practices can help in reducing solid waste, conserving water and protecting natural resources. They can also help alleviate climate change. EPP reflects a responsible, sustainable and environmentally driven buying decision, that often lead to the preferred choice of energy-efficient products, minimal packaging, recyclable items, less energy and water usage and low of pollution impact [12-13].

This is because environmentally preferable characteristics include products and services that conserve energy and water, minimize generation of waste and releases of pollutants; products made from recycled materials and can be reused or recycled; energy from renewable resources such as bio based fuels, solar and wind power; alternate fuel vehicles; and products using alternatives to hazardous or toxic chemicals, radioactive materials and bio hazardous agents. Among the EPP practices are purchase products that are durable or repairable, long lasting, reusable or refillable. EPP practices may be more cost effective in the long run as EPP practices is the affirmative selection and acquisition of products and services that most effectively minimize negative environmental impacts over their life cycle of manufacturing, transportation, use and recycling or disposal.

1.2 Issues and Challenges

EPP behaviour has been said to strongly stemmed from one's fundamental focus to lessen the adverse environmental impact and to increase resource efficiency [14], without compromising the quality of the products [13]. Although additional prices always incur in EPP, other factors such as

good product quality, brand positioning and value for money will implicate customer satisfaction in buying green products, which in turn strengthen the behaviour for EPP [15]. Purchasing community may affect our local environment and the health of our citizens as well as the global community. Purchase and use of environmentally preferable product can have profound impact to improved ability to meet existing environmental sustainability goals. However, to what extent the young consumers are aware and care about all the benefits of EPP is still uncertain, although past studies have acknowledged some important factors associated with EPP such as knowledge, attitude, awareness and promotion.

1.2.1 Knowledge

Knowledge constitutes a vital dimension in determining a person's behaviour towards EPP. Knowledge in environmental issues helps the consumer to understand and examine the effect the ecosystem has on society, promotes greater awareness of green issues, and consequently cultivate favourable attitudes toward green products [15-16]. In this study knowledge can be define as the factual information an individual has regarding environmental issues or problem and standard or action strategy. Suki's [15] study on 350 public residents in Labuan, Malaysia indicates that green brand knowledge has a positive impact on consumers' attitude toward green brands.

The study also highlights the imperative role of knowledge sharing especially from family members and friends who already had a positive experience with green product purchases. They would influence others with positive word-of-mouth, and this would be very significant influence to youth who are highly connected to social media. Moreover, a positive feedback from close and trusted relationship would persuade the green sceptics to be green consumers, because lack of experience, knowledge and misinformation might reduce pro-environmental behaviour. A recent study on youth's green purchasing in Ghana also confirms that knowledge and pro environmental behaviour are positively linked [17]. Therefore, the study postulates that:
H1: Knowledge has significant positive influence on EPP of the young generations.

1.2.2 Attitude

Milfont and Duckitt [18] describes environmental attitude as the ability of evaluating the environment's condition with a certain level of agreement (favor) or disagreement (disfavour). Zelezny et al. [19] asserted that environmental attitudes are the perceptions of individuals who considering themselves to be part of the environment. For this study attitude is the feeling an individual has about the environmental issues. The scholars advocate that when the consumers possess right attitude towards environment, they show higher purchase preference towards green products [17]. Uddin and Khan [20] explore the green purchasing behaviour of young urban consumers in India reported a significant influence of attitude on green purchasing.

The study also noticed the attitudinal difference between gender, with female showing higher environmental attitude towards environment compared to male. A study by Tan et al. [21] also supports that consumer attitudes, besides perceived behavioural control significantly affects purchase intentions of energy efficient household products in Malaysia. Correspondingly, these results are consistent to Yadav and Pathak [16] study, which claimed that consumer attitude toward green products positively influence his or her green purchase intention. As such, the study hypothesized that:
H2. Consumers' attitude toward green products have a significant influence on EPP

1.2.3 Awareness

The link between environmental awareness and purchase behaviour has been widely studied by the researchers [22-23]. Environmental awareness does not only base on the one's knowledge about the environment, but it comprises the determination, values, and necessary skills to solve environment related issues. Moreover, environmental awareness is the first step to carry out responsive behavior [24]. Although the environmental awareness in developing country like Malaysia is still low, Ahamat's [22] study lends evidence that environmental awareness is positively related to environmental purchasing behaviour among Malaysians. Similarly, Lee [25] noted that environmental exposure and awareness raised through mass media appear to be one of the significant predictors of green purchasing behaviour among young consumers in Hong Kong. Xu et al. [26] investigates the effects of general environmental awareness factors on consumers' intention to buy green vehicles noted some influence on the relationship. Thus, the following hypothesis is proposed.
H3: Environmental awareness has significant positive influence on EPP

1.2.4 Promotion

Promotion has some influence on purchase decision [27]. Promotion is an essential tool in marketing to make the product and services visible to the consumers. Given the rising awareness of the environmental products globally, green promotion is becoming a strategy to communicate the product value to the market. Besides, it also influences public perception that buying green products is better for them and the environment [22]. According to Cherian and Jacob [28], green promotion could communicate the company's eco-focus, educate the consumers on environmental preferences, and influence their purchasing behaviour accordingly. In non-profit organization, green promotion or campaign helps to raise awareness on environmental issues, with the aim to change the behaviour towards environmental sound practices, like green consumerism. Besides, active communication campaigns related to green attributes may induce a more favourable perception of green brands among consumers, which in turn develops green brand positioning. Previous researchers noted that the placement of green brands has a substantial effect on the purpose of purchasing green goods [29-30]. Therefore, the study hypothesized that;
H4: Promotion has significant positive influence on EPP

In understanding the environmentally responsible behaviour, a proposed model by Hines, Hungerford and Tomera [31] about environmentally responsible behaviour was used. The model which suggested that attitude, knowledge and sense of personal responsibility are the among the variables which determine whether the individual would adopt the environmental responsible behaviour of not. The theoretical frameworks of this study was designed by considering the variables highlighted in the past studies with the intention to examine the influence of knowledge, attitude, awareness and promotion on the EPP of young generation in Malaysia. Figure 1 show the framework of the study.

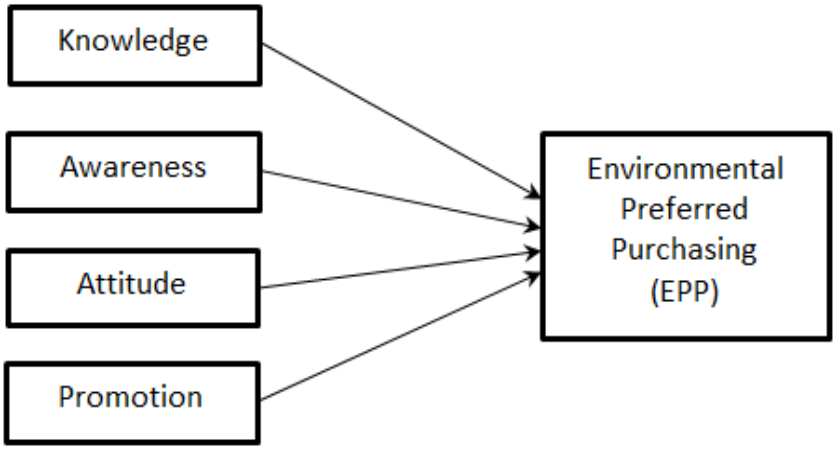

Fig. 1. Research Framework

2. Methodology

In examining the issues and challenges of environmental preference purchasing among young generation in Malaysia, a quantitative approach was adopted. There are several benefits and limitations associated with the questionnaire survey method. The cost of administering surveys is relatively low and respondents have time to think about their answers. A survey was conducted on the staff and students of one of public university of the country.

The instrument used for data collection is a set of questionnaires which was developed and distributed to the targeted respondents. The instrument was divided into two part. The first part is to capture the demographic information of the respondent and to ensure only information from targeted respondents were used in the data analysis. The second part was design to accumulate the data about all the variables examined in the study. An interval scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used.

The questionnaires were tested, standardized, and validated to produce large amounts of data from the sample populations. The university has a total of 30,670 students at the Undergraduate and Postgraduate levels. Besides, there are a total of 1,225 academic staff and 1,457 administrative and support staff currently serving at the University [32]. Data from 378 respondents was received. However, after screened to ensure the data is useable, valid and reliable, only 324 were appropriate for further statistical analyses. Descriptive analysis, correlation analysis and multiple regression analysis were conducted to examine the influence of knowledge, awareness, attitude and promotion on EPP practices.

3. Result and Discussion

3.1 Demography and Descriptive Analysis

The respondents of this study are staff and students of the selected university which age below than 40 years old. 70 percent of the respondent are female and majority of them are single. Figure 2 shows the demography of the respondents.

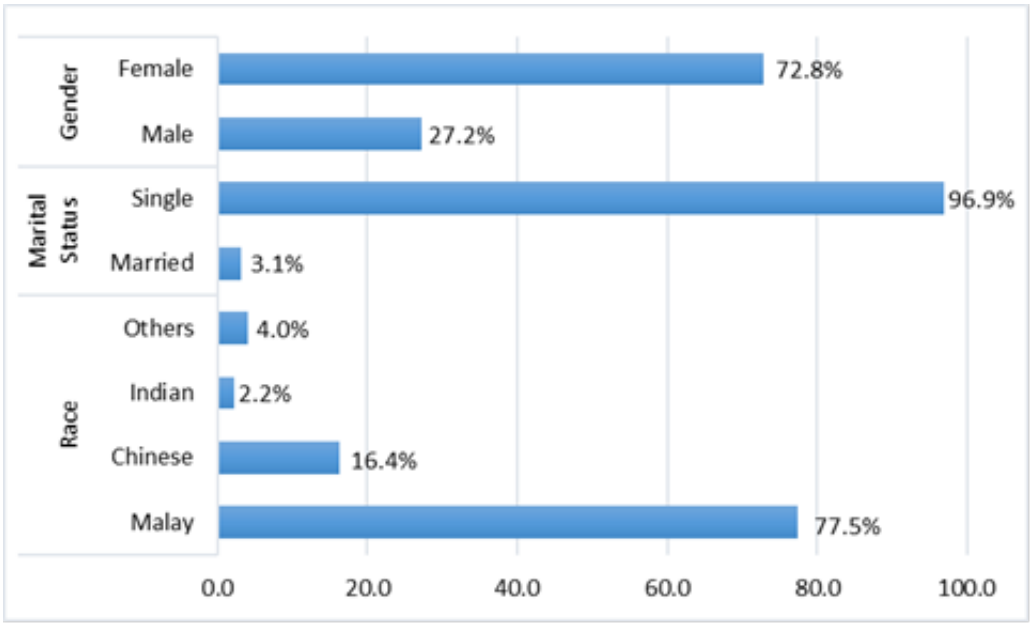

Fig. 2. Demography of the Respondents

Based on the descriptive analysis, it is found that the EPP practices among young generation in the university are at moderate level, with the mean score 3.942. Among the four variables, 'knowledge' indicates the highest mean score while 'attitude' obtains the lowest mean score. The mean score of each variable is shown in Table 1.

Table 1
Descriptive Analysis

Variables	Mean	Std. Deviation
EPP	3.942	0.691
Knowledge	4.581	0.443
Awareness	4.095	0.605
Attitude	3.549	0.779
Promotion	4.291	0.593

The result of data analysis demonstrated that, less than 50 percent of the 324 respondents were intensely practice EPP. The highest EPP adopted by the respondents is 'choose long lasting product' (47%). While the lowest EPP adopted is 'always buy an environmentally friendly product' with only 27% of the respondents proclaim that they practice it. Figure 3 shows the percentage of EPP practices among the respondents.

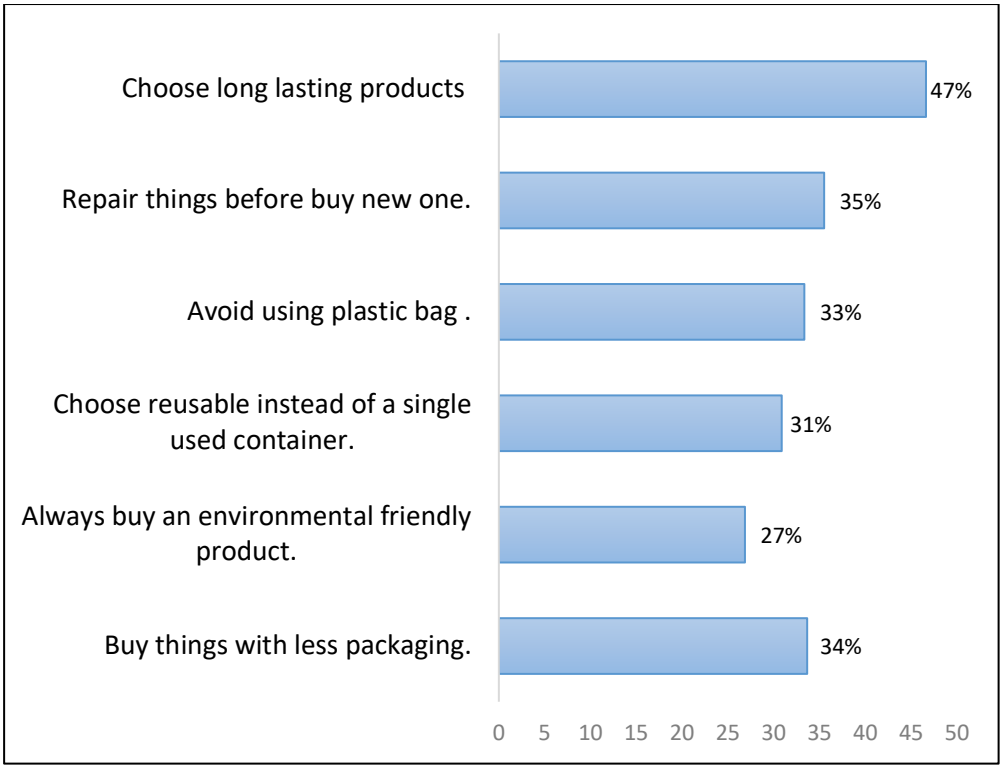

Fig. 3. Environmental Preferred Purchasing Practices Among Young Generation

The fact that most of the respondents perceived green products are associated with durability, the results coincide with other researchers who noted the significant influence of knowledge and promotion in motivating towards EPP [28-31]. When value in green products and perceived the benefits are well communicated, people are more convinced and influence their behaviour [27].

Furthermore, the study also identifies several reasons that impede the young generation from implementing EPP practices. Among the reasons given are; (i) there is no point in doing what they can for the environment such as EPP practices unless everyone does the same (68.8%), (ii) inconvenient waste separation facilities really matters (57.1%) (iii) participation in practicing EPP is time consuming (54.6%), (iv) taking the steps to reduce environmental problem costs too much money (47.5%) and (v) nothing can be done to improve the quality of the environment (46.6%). Pointing to these issues, it is notable that people are also influenced by their society norm. Therefore, educating the whole society is imperative to ensure that good practices are widely spread and influence every individual in the society. Moreover, the supportive mechanism such as appropriate facilities is also important, because when people perceived a particular practice is a burden to them, they will unlikely adopt it.

3.2 Hypotheses Testing

The Pearson Correlation analysis is used to examine the relationship between dependent and independent variables and to indicate the strength of the relationship as well as the direction of the relationship. In assessing relationships involving human behaviour the correlation coefficients tend to be lower than -/+ 6 as humans are hard to predict (Frost, 2016). Based on Table 2, all the correlations between the four independent variables and the dependent variables are positively significant. It is found that awareness factor has the highest strength followed by promotion, knowledge and attitude.

Table 2
Pearson Correlation Analysis

Variables	EPP
Knowledge	.350**
Awareness	.638**
Attitude	.332**
Promotion	.411**

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

Based on the result of Pearson Correlation analysis, all hypotheses of this study are supported. Hence, the findings are comparable to previous studies that observed significant influence of knowledge, attitude, awareness and promotion towards EPP [15-17].

In identifying the best predictor influencing EPP practices among the students and staffs in the university, multiple regression analysis was applied. According to Gliner [33], the relationship is significant if the p-value of the coefficient is below 0.05. This mean that the independent variable influences the dependent variable. In contrast, the relationships are not significant if the p-value of the coefficient is above 0.05 which indicates that there is no influence between the independent and dependent variables. Table 3 show the summary of regression analysis for variables predicting EPP practices.

Table 3
Regression Analysis

Variables	EPP practices				
	Un-std. B	Std. B	t-value	Sig.	VIF
(Constant)	0.344		1.057	0.291	
Knowledge	0.122	0.078	1.551	0.122	1.413
Awareness	0.626**	0.548	9.735	0.000	1.755
Attitude	0.103*	0.116	2.543	0.011	1.164
Promotion	0.025	0.022	0.387	0.699	1.717
R^2		0.425			
Adjusted R^2		0.417			
F for change in R^2		58.853			
Durbin-Watson		1.901			

Notes: N =324

The result of multiple regression analysis shows that the coefficient of determinant (r^2) is 0.425 showing that factors explain 42.5% of the variation in EPP practices.

4. Conclusions

Understanding the environmentally purchasing practices (EPP) among the young generation is vital towards promoting the sustainability agenda. This study provides empirical evidence that EPP among our young generation are influenced by their awareness, attitude, knowledge and also promotion or encouragement by the public and government. Notably, awareness is the most influencing factor in cultivating the EPP practices. The result conveys that raising awareness is a jump start to offer a new mind-set and promote a sustainable behaviour. When people are aware about the cause and effect of their practices, coupled with the knowledge to do it the right way, will be a

key to change one's behaviour. Nonetheless, EPP is unlikely to be an extensive practice if majority of the community do not bother about it, and convenient support to encourage EPP is scarce.

These findings also implicate several recommendations for the practitioners and policymakers to promote EPP. First, it signifies the important role of awareness raising programs related to the environment at the national and global level. Campaigns and promotion about environmental sound practices can be a useful tool to communicate the benefits of preserving the ecosystem and the nature. Moreover, the businesses could strategize to promote the green values in their product and services in order to lead the customers towards EPP.

Second, provide appropriate facilities such as waste separation and collection system, as well as well the incentives to encourage the EPP practices. Such convenient support will help to sustain the intended practices, and in many cases the push factor through fine and penalty would also help to cultivate the behaviour toward environmental conservation.

Finally, the are some limitations worth to be acknowledged in the present study, which could pave a direction for future research. First, the future research could employ the qualitative approach, as opposed to the quantitative nature of the present study in order to intensely examine how the factors influence the EPP. Second, the scope could also be expanded from one single case of a university, to include more universities or other organizations to participate in the study. In this way, generalizability of the result could be more significant. Moreover, a comparative study might be possible to be done at a larger context.

Acknowledgement
We would like to acknowledge the valuable contributions of all the staff of the Department of Research and Innovation Management Centre (RIMC) and School of Technology Management and Logistics (STML) of Universiti Utara Malaysia, and Universitas Islam Bandung, Indonesia as our collaboration institute for awarding us the Matching Grant to this research.

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