

## **GREEN MARKETING PRACTICES AND CUSTOMER PURCHASE INTENTION: A STUDY OF RESTAURANTS IN VAVUNIYA TOWN AREA**

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### **ABSTRACT**

Today, the need for green marketing has heightened, as environmental issues facing the world have become more pronounced. Past research on green marketing and consumer purchase intention has been conducted mainly in developed and developing countries. Present study aims to explore the association between green marketing mix and customer purchase intention with a study of restaurants in the Vavuniya Town area. 100 customers from four Restaurants – Nelly, Oviya, Pulleys, and Suwarka – which are situated in the Vavuniya Town area – were randomly selected from the database of the restaurants and issued the questionnaire through their e-mail. Chi-Square test calculated for testing the association between personal factors and green marketing mix with customer purchase intention and Principal Components Varimax Rotated Method of factor analysis used to measure most important green marketing mix factors on the customer purchase intention. The findings of the study indicated that the gender of the customers had been positively associated with purchase intention and other three demographic variables – age, annual income, educational qualification – were not associated with the customer purchase intention, and the green marketing mix was significantly associated with the customer purchase intention. Further, the research examined the factor wise score to find the most critical factor influencing the purchase intention of the customers. The results indicated that the green promotion mix had been a major predictor of determining purchase intention of the customers of the restaurants at Vavuniya. The future study can further consider other three variables: physical environment, process and people with four mixes for considering other relevant variables and dimensions with mediating and moderating variables, as well as mixed methodology, can be applied. As this research study only covered about the Restaurants in Vavuniya Town Area, further researchers can assess other green restaurants in Sri Lanka.

*Keywords: customer purchase intention, green marketing mix, personal factors, restaurants*

## **INTRODUCTION**

Nowadays, customers can see an increasing trend in the business world. Most of the businesses also consider the environmental problems that are occurred in their operational activities because customers commonly know that in the business process cycle, sourcing, manufacturing, logistics are happened. From those, there may be harmful effects to the environment. With the increment of the awareness for these environmental issues, the utilization of environmentally friendly products has been already grown (Nik Abdul Rashid, 2009). Many factors may be influenced when the customers decide to buy a product or service. The purchasing decision is determined by the various types of factors such as the price of the product, quality, celebrity endorsement, fashion and sometimes family relationships also (Shafiq et al., 2011).

In the present era, a large number of business organizations and consumers think about environmental problems and sustainable consumption. The reason is that many reports have highlighted the negative impacts of human activities, which can be caused for environmental pollution. Because of this problem, green marketing is a much-emerged topic in society. When consumers also take their decision, they may consider whether this organization follows the environmentally responsible behavior or the organization does not follow. Especially in the business world, for corporate social responsibility, the green concept is most widely used (Olsen et al., 2014). When marketers make their decisions today, they have come up with marketing mix decisions about the product, price, place, and promotion by considering the environment. As well as when the customers take their purchasing decision, they also think about

the environment. Many factors are affected while they take their purchasing decision by considering the environment. Some may be personal and some may be related to the marketing mix.

In the summation, a review of previous studies related to the impact of personal factors and the marketing mix factors on the green purchase intention of the buyers that few researchers (Shafiq, et al. 2011) have empirically examined. In this current scenario, there is an instant need to identify how personal factors and green marketing mix influence customer purchase intention, especially on Restaurants in Vavuniya Town Area.

From the question of the present study, the objectives of the research are to

- analyse the association between personal factors (gender, age, educational qualification and income) and customer purchase intention of the services from the Restaurants at Vavuniya.
- measure the association between green marketing mix factors and customer purchase intention of the services from Vavuniya Restaurants.
- rank the most influencing green marketing mix factor on the purchase intention of the services from the Restaurants at Vavuniya.

## **LITERATURE REVIEW**

The willingness of the customers' mind to purchase or buy a product or service is called "purchase intention", which has another profile that customer takes his decision to purchase after the evaluation. When the customer is going to decide whether this product should not be bought or bought, several factors affect it Eventually, he gets his decision by depending on the prominent factors

(Keller, 2001). Price of the product, design, packaging, knowledge of the product, quality, celebrity endorsement, fashion, and sometimes family relations are also affected to the customer's purchasing process (Shafiq et al., 2011). Most of the customers think about the environment and the impacts from the products they buy (Bonini & Oppenheim, 2008). In the consumer goods and services market, green products have been gradually increased from small markets to large markets (Roberts, 1996). Similarly, green marketing has been highlighted to fulfil the need of the consumers who always expect to buy green products (Peattie & Crane, 2005).

Karunaratna et al. (2020) explored the green product, green prices, green places, and green promotion on green purchase intention through customers' attitude towards the environment. The study explained the mediation analysis to test the mediating impact of customers' environmental attitudes on the relationship between green marketing mix and green purchase intention. Consumer attitudes and consumer purchase intention impact green marketing (Jayathilaka & De Silva 2018). Further, the study suggested that consumer affection and consumer cognition had an impact on the purchase intention of consumers in Sri Lanka.

Nor Azilah Husin, Astri Yulia, and Amirul Syafiq Mohd Ghazali (2016) study indicated that customers have moderate awareness about green marketing in the hotel industry. Furthermore, green marketing awareness was statistically significantly linked to the products and prices offered by the hotels, while the promotions and location of the hotels were not significant predictors. The results imply for hotel industry in which they need to pay more attention to the products offered for their guests to support the success of their marketing

strategies. In addition, the products also need to be supported by a competitive price offered to ensure the increase of visitors in the hotels.

Wu and Chen (2014) explored that the green marketing awareness by consumers toward a green product has a positive influence on the consumer's purchase intention. Shafaat and Sultan (2012) defined that the "Go green concept is essential for both tourism and hotel industries. The hotel industry, which consists of worldwide, has gone up the being with the environment to their activities (Fernandez – Alles & Cuadrado-Marques, 2012). To compete with other lodging services and win the market over them, Hotel adopts the green practices significantly to fulfil their need of gaining a competitive advantage. Adoption of green practices enables hotels to provide their service with the green marketing concept.

The hotels adopted various types of strategies for the green marketing to respond to the emerging problems of the environment. Environmental Management systems (EMS) can be called one of the strategies mentioned above. This includes how to use energy, water, material resources without minimum wastage to gain maximum output by covering all the sides of the operations in hotels. When the hotels implement various green marketing strategies, they are given different types of certificates and awards. From giving the awards and certificates, hotels are admired for involving and being as a motivation for another person's to activate for contribution for the green concept (Chan, 2008).

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decide whether this product should not be bought or bought, several factors affect it. Eventually, he gets his decision by depending on the significant factors (Keller, 2001). Price of the product, design, packaging, knowledge of the product, quality, celebrity endorsement, fashion, and sometimes family relations are also affected to the customer's purchasing process (Shafiq et al., 2011).

Most of the customers think about the environment and the impacts from the products they buy (Bonini and Oppenheim, 2008). In the consumer goods and services market, green products have been gradually increased from small markets to large markets (Roberts, 1996). Similarly, green marketing has been highlighted to fulfil the need of the consumers who always expect to buy green products (Peattie and Crane, 2005). Suppose the firms are on the green concept. In that case, they can achieve more advantages, which are reducing the consumption of energy, enhancing the corporate social responsibility and the brand image of the organization, gaining stability in the competitive market and increasing the corporate revenue (Bonini & Oppenheim, 2008; Van Yperen, 1996).

The customers should be provided the relevant information about how their products and services help keep the environment safe and sustainable by the organization to go up the market potential subsequently. It is better understanding of how the customers' behaviour toward the green products by the organization (D'Souza et al., 2006).

Based on the above literature, the present study focused on the demographic factors and the green marketing mix factors influencing the customer purchase

intention of the hotels in Vavuniya Town area. From the above literature survey following hypotheses are derived in this study.

H<sub>1</sub>: There is a significant association between personal factors and customer purchase intention.

H<sub>2</sub>: There is an association between green marketing mix factors and customer purchase intention.

## **RESEARCH METHODOLOGY**

### **Sample of the study**

This research was conducted in a quantitative way, and it is a descriptive study. The researcher has selected the four Restaurants, Nelly, Oviya, Puleys, and Suwarka, out of six restaurants situated in the Vavuniya Town area. Based on the higher educational level of the customers of the restaurants 120 customers were randomly selected from the data base of the restaurants and issued the questionnaire through their e-mail and 104 customers were responded and the customers did not perfectly fill 04 questionnaires. Finally, 100 customers from the customers of the hotels are considered as the sample of the study.

### **Data Collection**

The researcher for this study gathered primary data and secondary data. Primary data collection is the required data collection method in this study. A questionnaire prepared and issued among the customers for collecting primary data. Secondary data were used to get the information about the concepts related to green marketing practices, green product, green place, green price, green promotion and consumer purchase intention to search out the information about the literature of this study. The secondary data were mainly

collected using websites, books, and journal articles. The questionnaire was developed by including the five-point Likert scale questions to measure the independent and dependent variables.

### **Data Analysis**

Data were analysed through a questionnaire issued to the customers of the hotels in the Vavuniya Town area. Chi-Square test calculates for testing the association among personal factors and green marketing mix with customer purchase intention. Principal Components Varimax Rotated Method of factor analysis used to measure most influencing marketing mix factors on the customer purchase intention. In the research process to analyse the collected data researcher uses the statistical package for social science (SPSS-21).

### **Reliability and Validity of the scales**

Measuring the reliability, Cronbach's Alpha was calculated. The Cronbach's Alpha is expressed as a correlation coefficient and its value ranges from 0 to +1. By Convention, alpha should be 0.70 or higher to retain an item in a scale (Bowling 2002); an alpha of 0.5 or higher is considered a sign of acceptable internal consistency. The Cronbach's Alpha of variables of this study is 0.790. Therefore, it is greater than the cut off rate. For testing the Adequacy of the data sample in this study, KMO and Bartlett's tests were measured. According to Kaiser and Meyer literature, the value sampling adequacy KMO and Bartlett's test is 0.798 and significant, which is greater than 0.5 for factor analysis (Child, 1990; Norusis, 1992). The results are illustrated in the Table 1.



**Table 1: KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.798
Bartlett’s Test of Sphericity	Approx. Chi-Square	843.306
	df	190
	Sig.	.000

*Source: Survey Data*

### DATA ANALYSIS

The present study describes the demographic variables (Gender, age, annual income, and educational qualification) and green marketing mix factors are considered independent variables and customer purchase intention is the dependent variable of this study. The Chi-Square Test results among personal factors, green marketing mix, and customer purchase intention are illustrated in Table 2.

**Table 2: Results of Chi- Square Test**

Variables	Chi-Square Value	DF	p.v	Significant
Gender	17.456	9	0.042	@ 5% significant
Age	23.680	18	0.166	Not significant
Annual Income	55.385	45	0.138	Not significant

Educational Qualifications	45.366	36	0.136	Not significant
Green Product	178.063	99	0.000	Significant
Place	198.536	72	0.000	Significant
Price	123.529	90	0.000	Significant
Promotion	228.601	90	0.000	Significant

*Source: Survey Data*

Table 2 divulges that the Chi-square value and P-value stating the relationship between gender of the customer and purchase intention were 17.456 and 0.042 ( $p < 0.05$ ). Therefore, it is inferred that the gender of the respondents has significantly influenced the customer purchase intention. The analysis of the relationship between the customers' age and purchase intention revealed that the Chi square and P values were 23.680 and 0.166 ( $p > 0.05$ ). Hence it is concluded that there exists no significant relationship between age of respondents and purchase intention. The customers' annual income has not significantly influenced the customer purchase intention as indicated by the Chi-square value 55.385 and P-value 0.138 ( $p > 0.05$ ). Next, it is realized that Chi-square value and P-value measured the association between the educational qualification of customers and purchase intention were not significantly found to be 45.366 and 0.136 ( $p > 0.05$ ) in this study. Finally, results indicated that the gender of the respondents significantly influences the customer purchase intention of the restaurants than the other three variables. Hence, hypothesis one (H1) - There is a significant association between demographic variables and purchase intention - is partially supported in this study.

According to the computed value of Chi-Square and P-value of green marketing mix factors and purchase intention are illustrated in table 2. There is strong evidence for the association between green marketing mix factors and purchase intention. It is understood that the green marketing mix factors significantly associate with customers' purchase intention in the restaurants industry. Hence, the hypothesis two (H2) - There is an association between green marketing mix factors and customer purchase intention - is supported in this study. An exploratory factor analysis with Varimax rotation was measured to identify the most significant green marketing mix factors. Twenty items of the green marketing mix and four components with eigenvalue greater than 1.00 were extracted with a total variance of 77.31%. The rotated factor matrix is illustrated in Table 3. Table 3 shows the variables used for the study purpose, which is explained below. Four-factor grouping can be used to represent the data. The factors are green product mix, green place mix, green price mix, and green promotion mix.

### **The factor I: Green Product Mix**

The total variance of factor one is 36.78% and Eigenvalue is 5.767. Therefore, it indicated that the Eigen value of the study is greater than the cut of rate. Five variables are indentified under the green product mix. The variables are Environmentally Friendly ( $X_1$ ), Healthy Amenities ( $X_2$ ), and Recycling Process ( $X_3$ ), Wastewater management system ( $X_4$ ), and Furniture and green decoration ( $X_5$ ). From the five variables of the green product mix, four variables are more influence on customer purchase intention than the variable of wastewater management.

**Factor II: Green Place Mix**

The total variance of factor two is 20.49% and Eigenvalue is 2.298. Therefore, it indicated that the Eigenvalue of the study is greater than the cut of rate. Five variables are indentified under the green place mix. They are the outside environment (X<sub>6</sub>), Compatible seating facilities (X<sub>7</sub>), Geographical Location (X<sub>8</sub>), Natural Swimming pool (X<sub>9</sub>), and Cafeteria (X<sub>10</sub>). These five variables are highly influenced by the customer purchase intention of the hotels' services.

**Factor III: Green Price Mix**

Factor III explains 11.85 per cent of the total variations in the variable set. This includes Environment sustainability (X<sub>11</sub>), willingness to pay an extra percentage (X<sub>12</sub>), More expensive (X<sub>13</sub>), Important (X<sub>14</sub>), and Lowest Price (X<sub>15</sub>). The price mix factors are also influenced by the customer purchase intention.

**Factor IV: Green Promotion Mix**

Factor IV explains 8.193 per cent of the total variations in the variable set. This includes Advertising about the environment (X<sub>16</sub>), social media to search for the green product (X<sub>17</sub>), Green Information through social media (X<sub>18</sub>), brands using green messages (X<sub>19</sub>), and Green programmes to save the environment (X<sub>20</sub>). This factor has provided a basis for conceptualising dimensions, which may be called green promotion mix factors.

**Table 3: Scale Items, Factor Loadings and Commuality Estimates  
For four factors of Green Marketing Mix.**

Item	Factor Loadings				h <sup>2</sup>
	F1	F2	F3	F4	

X <sub>1</sub>	0.750			0.633
X <sub>2</sub>	0.732			0.670
X <sub>3</sub>	0.540			0.675
X <sub>4</sub>	0.445			0.565
X <sub>5</sub>	0.670			0.636
X <sub>6</sub>		0.632		0.588
X <sub>7</sub>		0.741		0.671
X <sub>8</sub>		0.755		0.686
X <sub>9</sub>		0.644		0.594
X <sub>10</sub>		0.822		0.757
X <sub>11</sub>			0.692	0.747
X <sub>12</sub>			0.770	0.791
X <sub>13</sub>			0.723	0.594
X <sub>14</sub>			0.802	0.681
X <sub>15</sub>			.0760	0.689
X <sub>16</sub>				0.583
X <sub>17</sub>				0.669
X <sub>18</sub>				0.743
X <sub>19</sub>				0.644
X <sub>20</sub>				0.778
Eigen Value	5.767	2.298	1.769	1.236
Variance	36.784	20.488	11.846	8.193
Cum.variance	36.784	57.272	69.118	77.311

*Source: Survey Data*

$h^2$  = Commonalities

Based on the Factor loading methods, the rankings were obtained based on factor wise average score for measuring the factors that mostly influence the Purchase intention of the Customers in the Restaurants industries in Vavuniya. The Factor wise average scores are illustrated in table 4.

**Table 4: Factor Wise Average Score**

Serial No.	Factors	Factor Score	Rank
I	Green Product Mix	4.015	3
II	Green Place Mix	4.112	2
III	Green Price Mix	3.966	4
IV	Green Promotion Mix	4.498	1

*Source: Survey Data*

According to the Factor wise average scores, the green promotion mix has been ranked as the first influencing factor with the factor wise average score of 4.498, while the second ranking was found to be a green place mix with the factor wise average score of 4.112. The green product mix has been identified as the third influencing factor with the factor wise average score 4.015. Finally, the green price mix has been the fourth rank with the factor wise average score of 3.966. It denotes that all green marketing mix factors are highly influenced on the purchase intention of the customers in hotels because the factor wise average score is higher than 3 (Gorsuch, 1983).

## **CONCLUSION AND RECOMMENDATIONS**

This research is carried out to evaluate the green marketing mix factors influencing customer purchase intention of the restaurants in the Vavuniya Town area. Based on the objectives, hypotheses were developed to test the influencing factors on the customer purchase intention. Firstly, the association between demographic variables and green marketing mix and customer purchase intention are found in this study. According to the findings gender of the customers has been positively associated with purchase intention, and the other three demographic variables were not associated with the customer purchase intention. Therefore, Hypothesis one is partially supported.

Further, the green marketing mix was significantly associated with the customer purchase intention. Then the, hypothesis two is supported with Wu & Chen (2014) and incorporated with the findings of Karunarathna et al. (2020). Further, the research explored the factor wise score for finding the most influencing factor of customers' purchase intention. The results indicated that the green promotion mix has been a major predictor of the customers' purchase intention of restaurants in Vavuniya. Hence the result is partially supported with Nor AzilahHusin, AstriYulia, & Amirul Syafiq Mohd Ghazali (2016) study. The study indicated that green marketing awareness were statistically significantly linked to the products and prices offered by the hotels, while the promotions and location of the hotels were not significant predictors. The study recommended to the management of the restaurants that if the management considers these green marketing practices in their restaurants, they can increase the customer purchase intention towards the restaurants. However, the study only considered the Vavuniya Town area restaurants' customers as the sample. This is one of the limitations of this

study. However, future study can further consider other three variables: physical environment, process and people except for these four mixes for considering other relevant variables and dimensions with mediating and moderating variables, as well as mixed methodology, can be applied. As this research study only covered the Restaurants in Vavuniya Town Area, further researchers can assess other green restaurants in Sri Lanka.

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