Determinants of Using Reusable Eco-Friendly Shopping Bags among Gen-Y

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Abstract: Reusable eco-friendly shopping bag usage among consumers in Malaysia as well as in the world is on the rise considering the requirement for environmental sustainability. Therefore, this study explores the Gen-Y intention towards reusable eco-friendly shopping bags and finds the reasons for them to buy and use them. Data was collected from 385 Malaysian Gen-Y in Kuala Lumpur via structured questionnaires. Applying the Theory of Planned Behavior, this study’s results demonstrated that many respondents were not aware of the reusable eco-friendly shopping bags. The findings also highlight that the shopping bag price and design influence the intention to use reusable eco-friendly shopping bags. The results of this study will be useful not only for policymakers, NGOs, and business owners but also for marketers to find ways to improve their marketing policies and create awareness among consumers.

Keywords: Reusable eco-friendly shopping bags, sustainability, theory of planned behavior, Gen-Y.

1. Introduction and Background

Generation Y (Gen-Y) constitutes more than 30% of the worldwide population and is unequivocally regarded as the generation most deeply invested in matters of environmental sustainability and social concerns. Gen-Y represents the initial cohort to come of age in a global context where the discourse surrounding climate change has become a regular and pervasive topic of discussion on an international scale. Gen-Y are compelled to confront the realities of catastrophic weather patterns, rising sea levels, the rapid expansion of genetically modified organism (GMO) agriculture, and species extinction, among other pressing concerns. The current situation has given rise to a cohort of individuals who advocate for more sustainability within popular culture. A significant portion of the current generation believes that they are compelled to actively participate in facilitating societal transformation. This study aims to examine the level of awareness among Malaysian Gen-Y regarding reusable eco-friendly shopping bags and to explore the factors that influence their preference for such bags.

Gen-Y refers to people born between 1981 and 1994, now aged 25 to 39 years, albeit subject to regional variations. The individuals of the present generation exhibit distinct attributes such as their values, life experiences, motives, and reliance on technology in their everyday routines, which in turn influence their collective consumer behaviors. Gen-Y has different behaviors, leading to various perspectives when choosing green or environmentally friendly products (Wijayaningtyas et al., 2019). On the other hand, some are also influenced by the culture of using plastic bags in their daily purchasing activities. They are less knowledgeable or do not know the purpose of reusable shopping bags or other environmentally friendly products. Generation Z (Gen-Z) are individuals born in 1995 or after and are considered a "green generation" who demonstrates higher environmental consciousness than older generations (Wang et Al., 2022), which draw the attention of researcher to study other generation i.e., Gen-Y of not becoming as environmentally friendly as Gen-Z.

The primary objective of this study is to study the relationship between price, awareness, design, and quality factors and the preferences of Malaysian Gen-Y regarding reusable eco-friendly shopping bags. This study commences by presenting the foundational theoretical framework of the pertinent literature, drawing from the research conducted by SD. Rajendran et al. (2019), it is identified that Malaysian Gen-Y's purchasing decisions regarding green packaging products are influenced by four primary factors: price, knowledge, quality, and design. Gen-Y has been recognized for its notable inclination towards the utilization of reusable eco-friendly shopping bags, in contrast to older generations. Ibrahim (2020) observes that individuals commence articulating their emotions of rage and discontent with plastic garbage pollution.
2. Literature Review

Price is a critical determinant in a consumer’s purchasing decision. The price is the monetary value a consumer is willing to exchange for a product. According to Kong et al. (2014), the cost of a product is identified as the primary determinant influencing consumers’ propensity to purchase eco-friendly products. Price is identified as the primary determinant of customer purchase intent for reusable shopping bags, as supported by various scholarly sources (Agyeman, 2014; Chen & Chai, 2010; Kong et al., 2014). The price factor exerts a substantial influence on the purchasing power of Malaysian Gen-Y. Consumers prefer obtaining the most favorable price on a product, often seeking discounts or reduced prices. The reusable eco-friendly shopping bags are considered a costly commodity in the market because they adhere to eco-friendly practices, safety measures, and high-quality standards, and have little environmental impact (Jaafar, 2012; Sharaf et al., 2015; Nguyen & Gizaw, 2014). Another element that adds to the elevated pricing is the diminished demand from the substantial expenses associated with reusable, environmentally conscious shopping bags. According to Ksenia (2013), the financial aspect of a consumer’s decision to engage in a green initiative holds significant importance.

According to Rokka and Uusitalo (2008), individuals with higher income levels prefer purchasing environmentally friendly products due to their safety concerns. Munnukka (2008) supports this assertion, contending that higher-income individuals exhibit more remarkable courage and openness in modifying their attitudes towards reusable eco-friendly shopping bags. Several firms are known for their commitment to producing reusable and eco-friendly shopping bags. One example is the Polypropylene Bag provided to customers when purchasing at IKEA shopping malls. The subconscious mind has a role in influencing consumers’ purchase intentions, as it impacts their willingness to pay. The buying intention is controlled by the variable of desire to pay (Toklu & Kucuk, 2016).

According to Barber et al. (2012), marketing managers must consider factors beyond purchase intention data when making strategic decisions about existing items or introducing new products. The authors further emphasized that placing exclusive reliance on purchase intention as a marketing strategy is an imbalanced approach. To comprehensively analyze, comprehend, and forecast consumers’ purchasing behaviors, marketers must extend their focus beyond mere buy intention. According to the studies conducted by Karbala & Wandebori (2012) and Agyeman (2014), the price of reusable eco-friendly shopping bags significantly influences consumers’ purchase intentions. According to Rashid (2009), Malaysians are experiencing a gradual change in their purchasing patterns and aspirations towards reusable eco-friendly shopping bags because of the country's escalating pollution levels.

**H1**: Price has a significant positive relationship with Malaysian Gen-Y’s intention to use reusable eco-friendly shopping bags.

The concept of awareness pertains to an individual’s capacity to acquire knowledge about the accessible information and their level of comprehension regarding the information related to specific items (Karbala & Wandebori, 2012). Consumer perception is a manifestation of cognitive recognition, serving as a valuable instrument in facilitating customers’ deliberation and resolution-making processes regarding purchasing behaviors. Consumers’ expectations about product quality and price, especially for eco-friendly things, are influenced by their level of knowledge (Munnukka, 2008). According to the study by Junior et al. (2018), clients with a limited understanding of environmental problems tend to exhibit consistent purchasing behavior primarily influenced by their past experiences. Customers are prone to repeat purchases due to their lack of knowledge or awareness. The authors further emphasize that the triggering factor may be attributed to a lack of awareness regarding the correlation between altering consumption habits and the potential reduction of the greenhouse effect.

To promote environmental sustainability, manufacturers must be responsible for educating their customers on the decision-making process. This educational initiative aims to contribute to the preservation and protection of the Earth’s natural resources. In the context of public education on environmental issues, manufacturers must assume accountability by incorporating responsible practices into their business strategy. This awareness campaign aims to educate the general people about the significance of environmental conservation for the well-being of future generations. Mansaray and Abijoye (1998) assert
that the degree of consumer knowledge regarding the utilization of reusable eco-friendly shopping bags exerts a substantial influence on the overall state of the environment. This discovery holds advantages for firms in strategizing and implementing more environmentally friendly items within their supply chain. The necessity for the awareness effort is evident.

**H2**: Awareness has a significant positive relationship with Malaysian Gen-Y’s intention to use reusable eco-friendly shopping bags.

The influence of quality on the shopping decisions of Malaysian Gen-Y is substantial. Most customers estimate a product’s quality based on their evaluation. According to Agyeman (2014), quality is the third most significant factor influencing consumers’ purchasing intentions, following environmental concerns and price. The quality of reusable eco-friendly shopping bags indicates the product’s overall quality. Consequently, the level of quality significantly influences consumers’ intentions to make a purchase and plays a crucial role in realizing those intentions.

The involvement of the Malaysian government in the green initiative has led to enhanced trust among Malaysians in the quality of eco-friendly products (Abidin et al., 2015). To improve the consumer experience, it is imperative to ensure the appropriate development and regulation of reusable eco-friendly shopping bags, with particular attention to critical elements such as color, design, pricing, shape, and environmentally conscious manufacturing processes. Additionally, it will increase customer purchasing intention within the market. The likelihood of customer purchase rises in proportion to the originality and impressiveness of the design of reusable eco-friendly shopping bags. Rajendran et al. (2018) and Asgharian et al. (2012) believe a positive correlation exists between the quality level and consumer satisfaction and loyalty.

**H3**: Quality has a significant positive relationship with Malaysian Gen-Y’s intention to use eco-friendly shopping bags.

Design can be conceptualized as a human-driven process that involves the amalgamation of several concepts to generate novel ideas, facilitate interaction, disseminate information, and encompass numerous other elements (Lee, 2008). Design can be conceptualized as the systematic procedure of converting an abstract concept into a visual or tangible form, thereby imbuing it with a significant aesthetic appeal or showcasing its practical functionality. Design is seen as a crucial performance indicator across all sectors. The prevalence of mobile usage and internet connection among Malaysian Gen-Y consumers is steadily rising in the contemporary day. Therefore, many companies employ design as the primary instrument for enhancing the performance of their goods. The primary objective of design is to improve the appeal of a product and attract a more extensive consumer base. The sales of the product being sold are expected to experience a notable increase due to implementing an exceptional design. Consequently, the purchasing intention of consumers is impacted by design.

According to Lee (2008), the eco-friendly logo holds significant importance as a design component. According to Abidin et al. (2015), incorporating eco-friendly design is expected to be an effective marketing strategy. According to Barber (2010), adopting eco-friendly practices will likely lead to increased consumer purchasing. The material used for reusable eco-friendly shopping bags is relatively expensive, primarily because of insufficient demand and awareness (Abdalkrim & Al-Hrezat, 2013). The purchasing behavior of consumers can be impacted by the distinct labeling of products (Rokka & Uusitalo, 2008). Furthermore, it is worth noting that the eco-label will encompass essential details about environmentally friendly products (Jaafar, 2012).

**H4**: Design has a significant positive relationship with Malaysian Gen-Y’s intention to use reusable eco-friendly shopping bags.
3. Research Methodology

The data collection for this study was conducted using Google Forms. The form was distributed to 400 individuals aged 20-39 years using various internet sites and social networking systems. The sample size for the population of this study is 385, reaching the minimum number of more than 100,000 population as suggested by Krejcie & Morgan (1970). The process of data gathering is carried out using the convenient sampling technique. To streamline the process of sample collecting, the social media platform has been chosen as the preferred method. The formulated inquiries have been transformed into a Google Form to facilitate sharing and dissemination. The questionnaire was disseminated and after that redistributed through many social media platforms over no less than fourteen days to aid the acquisition of the sample.

The factors of the survey instrument, which includes price, awareness, design, and quality influencing Malaysian Gen-Y’s preference towards reusable eco-friendly shopping bags as independent variables and dependent variables were adapted and modified to suit the context of the research study (Shalini, Minder & Siti Noraida, 2019). This research employs three data analysis techniques: descriptive analysis, correlation, and regression. The hypothesis of intention towards reusable eco-friendly shopping bags posits the existence of five variables. The data that is obtained will be subjected to analysis utilizing a statistical analysis tool. SPSS Statistics is a software package that is commonly employed for conducting interactive or batched statistical analysis. The data analysis in this study was conducted using SPSS version 26 software.

4. Results

To gain a comprehensive understanding of the demographic and background characteristics of the participants in this survey, pertinent information about their age, gender, educational background, occupation, and preference for eco-friendly bags was collected. The findings were classified as a descriptive analysis in Table 1: Profile of the Respondents.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>138</td>
<td>35.8%</td>
</tr>
<tr>
<td>Females</td>
<td>247</td>
<td>64.2%</td>
</tr>
<tr>
<td>Total</td>
<td>385</td>
<td>100%</td>
</tr>
<tr>
<td>A.G.E.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-30</td>
<td>68</td>
<td>17.7%</td>
</tr>
<tr>
<td>31-35</td>
<td>139</td>
<td>36.1%</td>
</tr>
<tr>
<td>36-40</td>
<td>140</td>
<td>36.4%</td>
</tr>
<tr>
<td>Total</td>
<td>385</td>
<td>100%</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Primary school</td>
<td>10</td>
<td>2.6%</td>
</tr>
<tr>
<td>High school</td>
<td>148</td>
<td>38.4%</td>
</tr>
</tbody>
</table>
Certificate/Diploma/Degree 214 58.6%
Post-graduate qualification 12 0.1%
**Total** 385 **100%**

**OCCUPATION**
Student/Unemployed 57 14.8%
Public Sector 52 13.5%
Private Sector 215 55.8%
Self-employed 61 15.8%
**Total** 385 **100%**

**Descriptive Statistics:** Descriptive statistics for price, awareness, design, and quality were conducted and Table 2 below displays the outcome. These provide the average mean scores of the variables tested in this study.

**Table 2: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Price</td>
<td>4.48</td>
<td>0.559</td>
</tr>
<tr>
<td>A</td>
<td>Awareness</td>
<td>4.43</td>
<td>0.582</td>
</tr>
<tr>
<td>D</td>
<td>Design</td>
<td>4.54</td>
<td>0.612</td>
</tr>
<tr>
<td>Q</td>
<td>Quality</td>
<td>4.46</td>
<td>0.586</td>
</tr>
</tbody>
</table>

The mean scores ranging from 4.48, 4.43, 4.54, and 4.4.6 were obtained from the price, awareness, design, and quality. These results indicate that respondents on average the preferences for using friendly and reusable shopping bags. The data obtained from this case study has been analyzed to assess its normality using the numerical perspective approach. All variables have been carefully considered to get a satisfactory outcome in the reliability test. Based on the evidence presented, it may be inferred that the outcome is nonparametric, given that the findings are displayed for all variable probabilities that are lower than 0.05.

The model summary for the regression analysis is shown in Table 3. The value of the multiple correlation coefficient, R (0.615) indicates a good level of prediction between independent variables and dependent variables.

**Table 3: Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.615</td>
<td>0.378</td>
<td>0.372</td>
<td>0.40163</td>
</tr>
</tbody>
</table>

Regression analysis is employed to elucidate the influence of alterations in the independent variables on the dependent variable. The regression analysis findings in Table 4 examined the influence of awareness, price, design, and quality on individuals’ intention to use reusable eco-friendly shopping bags. The dependent variable in this study pertains to the preferences for reusable eco-friendly shopping bags. It serves as a measure to elucidate the connection between the dependent and independent variables.

Upon examining the findings presented in Table 4 Regression Analysis, it is evident that price and design emerge as two independent variables that exhibit a statistically significant positive relationship with consumer preference for green packaging, as indicated by a p-value of less than 0.05. Conversely, the remaining two independent variables, awareness, and quality do not demonstrate a significant relationship with consumer preference for reusable eco-friendly shopping bags, as indicated by a p-value greater than significant alpha 0.05.
Table 4: Analysis Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
<th>Regression Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Price has a significant positive relationship with Malaysian Gen-Y's intention to use reusable eco-friendly shopping bags.</td>
<td>Supported</td>
<td>B=0.410, P=0.0001</td>
</tr>
<tr>
<td>H2: Awareness has a significant positive relationship with Malaysian Gen-Y's intention to use reusable eco-friendly shopping bags.</td>
<td>Not supported</td>
<td>B=0.08, P=0.1951</td>
</tr>
<tr>
<td>H3: Quality has a significant positive relationship with Malaysian Gen-Y's intention to use reusable eco-friendly shopping bags.</td>
<td>Not supported</td>
<td>B=0.19, P=0.0751</td>
</tr>
<tr>
<td>H4: Design has a significant positive relationship with Malaysian Gen-Y's intention to use reusable eco-friendly shopping bags.</td>
<td>Supported</td>
<td>B=0.496, P=0.0000</td>
</tr>
</tbody>
</table>

Discussion: The significance of this research lies in its ability to offer a plausible solution to the stated objectives. These ultimate aims were to analyze the attitudes of Gen-Y towards reusable eco-friendly shopping bags and examine the associated environmental ramifications. It will consider all pertinent factors related to the purchasing intentions of consumers towards the various parts of reusable eco-friendly shopping bags and their interconnectedness. This study examined the correlations between design, awareness, price, and quality concerning customers’ inclination toward reusable eco-friendly shopping bags. The findings indicate a statistically significant positive link between the parameters mentioned and Gen-Y customers’ intentions to use reusable eco-friendly shopping bags.

The impact of pricing on the purchasing power of Malaysian Gen-Y is significant. Consumers consistently seek the most advantageous arrangement when acquiring a product. Reusable eco-friendly shopping bags are considered a costly product on the market due to their environmentally friendly attributes, superior quality, and reduced negative environmental impact. Marketers must extend their analysis beyond mere purchasing intentions to comprehensively assess, comprehend, and forecast customer purchasing behaviors. The price factor significantly impacts consumers' purchasing intentions regarding reusable eco-friendly shopping bags.

The desire of Malaysian Gen-Y to utilize reusable eco-friendly shopping bags is influenced by various factors, with knowledge being one of them. Knowledge can be defined as an individual’s capacity to acquire further information and their level of comprehension of specific items. The consumer’s degree of awareness significantly influences the expectations about product quality and pricing, particularly in the context of reusable eco-friendly shopping bags. However, the current study depicted that consumer within the parameter of Gen-Y was not well equipped with the knowledge of eco-friendly products thus their awareness.

Design influences the desire of Malaysian Gen-Y for reusable eco-friendly shopping bags. Mixing concepts and developing new ideas, interaction, information, and many other things is often called design. In the twenty-first century, the number of mobile phone and internet users in Malaysia is increasing among Gen-Y. In most industries, design is the most critical tool for their goods. Design wants to make a product more appealing to potential customers. The product’s design is so good that the product will sell more.

The significance of product quality in influencing the purchasing decisions of Malaysian Gen-Y is noteworthy. The study reported that the quality of shopping bags is less important among Gen-Y consumers. They evaluate a product by forming subjective judgments regarding its perceived quality. Following environmental concerns and price, customer happiness emerges as the third most potent determinant of customers' purchasing decisions. In addition, the government's participation has influenced the faith in the quality of reusable eco-friendly shopping bags among Malaysians in the green program. The production and quality control of reusable eco-friendly shopping bags should be conducted with meticulous attention to vital components such as color, design, pricing, form, and green injection, to enhance the overall customer
experience.

In summary, the preferences of Gen-Y towards environmental sustainability significantly influence their inclination towards utilizing reusable eco-friendly shopping bags to a certain degree. Moreover, this can lead to a deliberate inclination towards reusable, environmentally-friendly shopping bags. Conversely, an individual’s stance on environmental matters can significantly influence their inclination to purchase reusable, environmentally friendly shopping bags. It may also shape their perspective on embracing sustainable practices and protecting the natural environment. Consumers’ likelihood of purchasing is positively influenced by their favorable perception of reusable eco-friendly shopping bags, ultimately leading to their decision-making process.

Additionally, this study offers policymakers and the public the necessary information to execute laws to promote environmentally sustainable effective practices. Hence, marketers possess the ability to devise informative promotional initiatives about reusable environmentally conscious shopping bags to safeguard the planet, utilizing social media platforms or adverts as channels for dissemination. These campaigns would underscore the utilitarian aspect of eco-friendly bags in their capacity to contribute towards preserving the Earth. To enhance consumer conviction, it is imperative to provide comprehensive and unambiguous information regarding reusable eco-friendly bags through social media platforms. This campaign is also in line with the initiative by the Malaysian government, to be specific, the Ministry of Science, Technology, and Innovation of Malaysia to use usable plastic bags.

5. Managerial Implications and Recommendations

Gaining a comprehensive understanding of this subject can yield significant marketing value for professionals in the field. Understanding consumers’ decision-making processes is vital in promoting environmentally friendly products. Due to the abundance of natural resources within their respective cultures, developing nations possess a distinctive advantage in serving as potential consumers of ecologically sustainable products. This study provides policymakers with valuable information that can enhance their decision-making processes. Examine and formulate optimal strategies for augmenting environmentally sustainable endeavors in forthcoming periods. Implementing an ecologically conscious policy can stimulate enterprises to develop novel marketing strategies that target promoting and selling eco-friendly products to customers.

Given that most Malaysian population comprises Gen-Y, it is imperative to direct policies and strategies toward this demographic. Moreover, Gen-Y should be actively encouraged to play a pivotal role in promoting environmentally sustainable practices. The manifestation of conscious behavior within emerging economies is poised to materialize imminently. Moreover, this study has the potential to provide valuable insights for organizations seeking to establish a novel business model centered on an emerging environmentally sustainable movement.

Researchers can conduct a comparable investigation by directing their attention toward a distinct sort or classification of ecologically sustainable products. The data obtained from the study can afterward be analyzed to ascertain the variations in attitudes and preferences across different categories. Jobber (year) suggests that to gain insight into consumer responses towards various sorts of products, researchers should conduct tests to assess purchase preferences for both high-participation and low-involvement products in the market. The consistent buying of reusable eco-friendly shopping bags can be attributed to the enduring influence of consumers’ value orientations. Moreover, scholars can carry out comparable investigations across other cohorts, extending beyond the confines of the Gen-Y. Researchers may include individuals from the Generation X and Baby Boomer cohorts in their study. This study enables researchers to examine and contrast the environmental behaviors of self-proclaimed and non-green consumers, hence facilitating a deeper understanding of the factors behind the latter’s reluctance to purchase ecologically friendly products. It is conceivable to analyze additional preferences and situational conditions comprehensively. Each successive generation will possess distinct perspectives regarding reusable, environmentally friendly shopping bags. It is crucial to consider the potential for utilizing alternative social media platforms as a means of data gathering in future research endeavors. For instance, Facebook, LinkedIn, and Google+ are social media networks that might serve as data-collecting platforms.
Conclusion: The present study effectively identified the preferences of Malaysian Gen-Y for reusable eco-friendly shopping bags, with purchase intention serving as a mediator, ultimately influencing the buying behavior of environmentally friendly items among Malaysian Gen-Y. Consequently, it can be observed that there exists a significant association between the preferences and all components, excluding the independent variables. Ultimately, an examination of the ramifications and constraints of this investigation was undertaken, accompanied by the formulation of suggestions for prospective scholars who may be inclined to pursue analogous research endeavors.

References


