



INFLUENCE OF SUSTAINABLE BRAND PACKAGING ON THE CONSUMER SATISFACTION OF SENIOR HIGH SCHOOL STUDENTS IN LETRAN MANILA

John Vincent Mendoza¹, Kate Ysabel Balde¹, Althea Chrizmhaire Bayot¹,
Margaux Pauleen Tan¹, Princess May Camacho¹, Jhuniel Dela Rama¹, Dane Edward Atacador²

¹Student, Senior High Student, Colegio de San Juan de Letran-Manila

²Faculty Member, Colegio de San Juan de Letran-Manila

ABSTRACT

In recent years, concerns about environmental sustainability are growing on a global basis, impacting both consumers and businesses. This study explored the influence of the factors that affect Senior High School (SHS) consumers in supporting sustainable packaging as well as their satisfaction towards sustainable packaging. Using survey questionnaires, data were collected from 170 SHS consumers in simple random sampling and analyzed using linear regression to measure the level of satisfaction of SHS consumers who utilized sustainable packaging. The results indicated that SHS consumers generally show very high levels of satisfaction with brands that use sustainable packaging. Furthermore, the results revealed that sustainable brand packaging has a significant influence on the satisfaction of senior high school students, where the factor sustainability claims have a significant influence on consumer satisfaction.

Keywords: Sustainable Packaging, Consumer Satisfaction, Influence level, SHS consumers, Letran Manila

INTRODUCTION

Background of the Study

Over the past few years, environmental sustainability has become more and more a concern on a global scale, influencing both businesses and consumers in the market. As environmental awareness grows, 74% of Gen-Z consumers are willing to pay more for sustainable products, according to a study stated in the Global Buying Green Report (Trivium Packaging, 2021). Due to this environmental trend, more and more business brands have adopted greener packaging solutions, aiming to attract consumers who are socially responsible. Despite all of these, the question of how moving towards sustainability influences consumer behavior and their satisfaction still remains, especially among younger generations in senior high schools.

Boz et al (2020) claims that more companies have responded to rising consumer demand for sustainability initiatives based on the recognition of a necessary shared value. The Sustainable Packaging Coalition (SPC) created an objectives database, which outlined the packaging sustainability aims of numerous companies. Corporations including McDonald's, Unilever, Nestlé, Kraft-Heinz, PepsiCo, and Coca-Cola developed goals in action to raise the sustainability of their packaging by 2025 and beyond. These goals include things like "increased recycling and recycled material while reducing virgin material composition, sustainable sourcing, weight reduction, packaging design for improved recovery, etc."

Sustainable packaging has been known for years. The SPC (cited in Sustainability, 2020) defines sustainable packaging as "a world where all packaging is sourced responsibly, designed to be effective and safe throughout its life cycle, meets market criteria for performance and cost, is made entirely using renewable energy, and once used, is recycled efficiently to provide a valuable resource for subsequent generations". Additionally, it stated that compostable packaging cannot be classified as sustainable if it is not produced with efficient materials, does not satisfy market demands, and is not profitable. Instead, its promotion would be inaccurate to label it as sustainable packaging.

This study addresses the lack of research on the influence of specific factors of sustainable packaging, such as social norms and personal values, package design, price, and sustainability claims, on consumer satisfaction among SHS students at Letran Manila. While the researchers' objective is to measure the level of satisfaction of SHS consumers that utilize sustainable packaging, a deeper understanding could be gained through a more detailed examination of which factors influence consumer satisfaction the most. For example, surveying whether students are more attracted to the environmental benefits, visual appeal, or perceived quality of sustainable packaging could highlight particular areas where firms might improve their approaches. Additionally, this study addresses the gap by examining the influence of sustainable brand packaging on consumer satisfaction. This gap may provide valuable insights into how young consumers, specifically SHS students, respond to sustainable packaging and how sustainable brand packaging influences consumer satisfaction.

Research Objectives

1. Measure the level of satisfaction of SHS consumers that utilize sustainable packaging.
2. Identify what is the level of influence of the factors that affect SHS consumers in supporting sustainable packaging.
3. Determine if there is a relationship between sustainable brand packaging and consumer satisfaction.
4. Recognize which of the sustainable packaging factors has an influence on the consumer satisfaction of SHS students.

Statement of the Problem

The main objective of this study is to examine how sustainable brand packaging influences the consumer behavior of SHS students of Letran Manila. Specifically, it aims to investigate the following questions:

1. What is the level of satisfaction of SHS students in using

- brands that utilize sustainable packaging?
2. What is the level of influence of different factors of sustainable packaging on SHS students when purchasing from brands that utilize sustainable packaging?
3. Is there a significant relationship between sustainable brand packaging and consumer satisfaction?
4. To what extent do social norms and personal values, package design, price, and sustainability claims influence overall consumer satisfaction with sustainable packaging among SHS students?

Null Hypothesis H0: Sustainable brand packaging does not significantly influence the consumer satisfaction of SHS students at Letran Manila.

Alternative Hypothesis Ha: Sustainable brand packaging significantly influences consumer satisfaction of SHS students at Letran Manila.

Review of Related Literature

The Role of Sustainable Packaging in Consumer Behavior

Research indicates that sustainable packaging significantly enhances environmentalist consumer behavior and can lead to increased product sales. This phenomenon is particularly evident in younger demographics such as Millennials, who are more responsive to green marketing strategies (Smith & Brower, 2012). As consumers become more aware of the environmental ramifications of packaging, there is a pronounced preference for eco-friendly options (Orzan et al., 2018). This shift in consumer preference underscores the need for brands to adopt sustainable packaging practices as part of their marketing strategies.

Current consumer behaviors are characterized by the pull-factor of being environmentally conscious. Thomas (2024) said that 74% of consumers prefer to pay a premium for products that use sustainable packages. Thus, this statistic stresses the fact that the degree of environmental consciousness with regard to packaging has become valuable when making decisions. Thomas (2024) also points out that brands utilizing environmentally friendly packaging are perceived as more trustworthy and responsible. This perception strengthens the connection between sustainable practices and brand loyalty, as consumers are more likely to support companies that align with their values. This shift is particularly pronounced among younger demographics, such as millennials and Gen Z, who prioritize environmental concerns in their consumption habits. As these groups continue to exert influence on the market, the demand for sustainable packaging is expected to grow, compelling companies to innovate in their packaging strategies to remain competitive. The adoption of sustainable packaging is not only seen as a competitive advantage but also as a necessity for companies to meet regulatory and social expectations. Many countries are implementing stricter regulations on plastic use and packaging waste, driving businesses to adopt sustainable alternatives. As a result, the intersection of consumer demand and regulatory pressure is shaping the future of packaging in the global market, where environmentally friendly practices are becoming the new standard.

Factors related to sustainability packaging perceptions

Numerous studies have examined consumer attitudes toward various aspects of packaging design; however, there is a notable lack of research evaluating how sustainable packaging influences consumer choices. This gap in direction-oriented information may explain why sustainable packaging, despite being highly promoted, often fails to meet market projections (Ziynet et al., 2020). Several factors have been reported to significantly influence consumer perceptions, including social norms and personal values, package design, price, and sustainability claims.

According to Terry's theory of planned behavior, self-identity, social identity, and group norms play crucial roles in shaping consumer intentions (as cited in Ziynet, 2020), a significant relationship exists between consumers' intentions and social norms only when individuals identify with a relevant reference group, highlighting the importance of group membership. This correlation is particularly strong when the group norm is perceived as "pro-recycling". In addition to this, recent studies have demonstrated that social influence operates not only through perceived norms but also through the desire to conform to environmentally responsible behaviors within one's community. For instance, White et al. (2019) highlight that sustainable consumer behavior is significantly shaped by descriptive norms (what others do) and injunctive norms (what others think one should do), especially among younger demographics who are more susceptible to peer influence. This indicates that promoting sustainable packaging may be more effective when aligned with socially visible and widely accepted behaviors within peer networks.

The review also emphasizes the role of graphics and colors in packaging design as widely used cues to signal sustainability. Interestingly, product efficacy perceptions decline when an eco-label or green color is used alone; in such cases, consumers may associate the color green with lower product efficacy, leading to decreased purchase intentions (Tobler et al., 2011). However, the addition of an eco-label to green-colored packaging can mitigate this negative effect. Beyond color, the tactile and structural aspects of packaging also influence consumer perception. Magnier and Schoormans (2015) found that minimalist and natural-looking packaging is often associated with eco-friendliness, but if the design appears too plain or cheap, it can undermine consumer confidence in product quality. Moreover, sustainable packaging that communicates environmental value through design elements such as recycled textures or biodegradable seals tends to increase consumer trust and perceived authenticity (Becker et al., 2011). This suggests that an integrated approach to design, combining aesthetics with informative labeling is key to influencing green purchase behavior.

Ziynet's review further cites Gadema and Oglethorpe's study in 2011 regarding the use and effectiveness of carbon labeling in food products. Their survey of UK supermarket shoppers found that 72% preferred carbon labels, yet 89% reported confusion regarding the information provided. The authors suggested that reliance solely on consumer preference can lead to feelings of guilt when purchasing products with higher carbon footprints. Instead, they advocated effective collaborations between policymakers and food supply chain members to improve consumer understanding.

Moreover, previous research has indicated that price is a significant barrier affecting consumer choices regarding sustainable packaging and recycling (Martinho et al., 2015). This highlights the need for further investigation into how price influences consumers' purchase intentions for green products and environmentally friendly packaging. Expanding on this, Van Doorn and Verhoef (2015) emphasize that while consumers express strong preferences for sustainable products, their willingness to pay a premium is often limited unless they perceive a direct personal benefit, such as product safety or health. Additionally, studies by Gleim et al. (2013) found that price sensitivity remains a dominant factor, particularly among students and low-income consumers, despite growing environmental awareness. This reinforces the importance of balancing affordability and sustainability in packaging strategies to avoid alienating price-conscious buyers.

Consumer Perception and Its Impact on the Growth of Green Products

The growth of green products can be a way to understand how the public feels about green brands and products. Their findings show that respondents with a positive view about green products also show higher satisfaction with green products, which is crucial information for making a purchasing decision. Having information about the public perspective of green products is important in conducting effective campaigns aimed at engaging citizens in more eco-responsible activities. (e.g., selective collection, product reuse, etc.), as well as implementing actions to promote environmental protection and further reduce natural resource consumption. According to their results, the researchers observed that such factors include a consumer's good attitude toward green items and their level of knowledge about these products. Several studies have found a strong relationship between customer happiness and purchase intention. If the sustainability of a product is a priority, satisfaction with obtaining it can be a grounding exhibit for green. Regardless, customers are willing to tackle environmental problems by choosing their products. They are willing to buy green items as long as they match the functionality criteria in comparison to non-green products in terms of quality, price, durability, and the ease of use is regarded as loyalty, which leads to future purchases of the same product or brand.

Sustainability packaging in the Philippines

In the Philippines, the shift towards sustainable packaging has also been reflected in the changing preferences of Filipino consumers. A study by Cruz and Santos (2023) highlights that 68% of Filipino consumers prefer purchasing from brands that incorporate eco-friendly packaging. This preference is largely driven by increased awareness of environmental issues such as plastic pollution, which significantly affects the country's ecosystems, particularly its oceans and waterways. The researchers found that many Filipino consumers, especially in urban areas, are more willing to support brands that actively promote sustainability through their packaging. They also note that brands that adopt sustainable practices, including the use of recyclable or biodegradable packaging materials, tend to build stronger emotional connections with their consumers. This results in higher levels of brand loyalty and satisfaction, as consumers feel they are contributing to environmental preservation by supporting such businesses. This aligns with global trends where eco-conscious purchasing behaviors are becoming more prevalent, particularly among younger consumers who prioritize social responsibility when making purchasing decisions.

A study made by Dena et al. (2023) stated that the majority of Filipino customers are currently seen to be active users of sustainable packaging in the Philippine market, and they typically use it twice a week on average, according to the researchers' findings. Furthermore, the survey shows that consumers in the 29-year-old age range are more receptive to using and purchasing eco-friendly packaging. Regarding social considerations, it was also found that female Filipino customers are more likely to purchase and use sustainable packaging when they have support from friends, family, and social media. In terms of economic considerations, women are also more likely than men to purchase sustainable tertiary packaging. Additionally, certain Filipino customers frequently choose to purchase and utilize environmentally friendly packaging to its strength and extended shelf life.

Research Framework

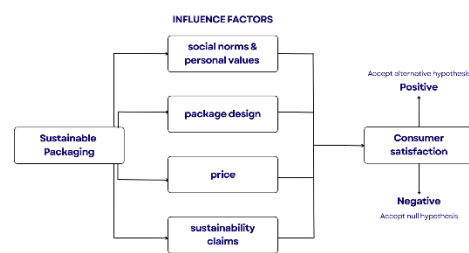


Figure 1. Conceptual Framework

Theoretical Framework

According to the theory of planned behavior (Ajzen, 1991), the goal of the idea was to take responsibility for every action that a person is capable of controlling. This model's central idea is behavioral intent, which is shaped by attitudes toward the probability that behavior will produce the desired result as well as personal evaluations of the advantages and disadvantages of that result. Attitudes, subjective norms, and perceived behavioral control are the three elements that determine intents. Depending on the extent to which a behavior is truly under the individual's control and the degree to which perceived behavioral control is a reliable indicator of actual behavioral control, external factors may also directly force or prevent behaviors, regardless of the intention.

Using the TPB framework, this study examined how those elements work together to affect consumer satisfaction with sustainable packaging from brands. The researchers determined links between attitudes, subjective norms, and perceived behavioral control by gathering data through surveys and interviews. This ultimately allowed the researchers to provide insights into how consumer satisfaction is impacted by sustainable packaging.

METHODOLOGY

Research Design

The data gathering procedure for the study was conducted through a structured survey method where SHS students from Letran Manila were the respondents for the study, focusing on those who had experience with brands that utilized sustainable packaging.

The researchers used a non-experimental research design, as it was the most suitable for examining the relationships between sustainable brand packaging and consumer satisfaction. Specifically, the study was carried out through survey and evaluative methods to assess the influence of sustainable brand packaging on consumer satisfaction and to identify factors that strongly affected the SHS students' decision to support sustainable brand packaging, as well as the level of satisfaction derived from supporting it.

An online self-administered questionnaire was developed, concentrating on key areas such as their influence on their purchasing decisions through scales, and their level of satisfaction with brands that use sustainable packaging. This study interpreted whether the expectations of the student consumers were met whenever they purchased from a brand that implemented sustainable brand packaging.

Prior to distribution, the questionnaire, was validated to assess its clarity and validity, with necessary adjustments made based on the feedback received. The final questionnaire was then administered online by distributing the online g-forms link through various

methods such as e-mailing and forwarding links to Messenger group chats to collect data instantaneously and also ambushing classrooms during break times and free times where QR code was provided to access the questionnaire link.

Sampling Method

Simple random sampling was the method used by the researchers to select study participants. Using simple random selection, each member of the population had an equal chance of being selected, minimizing bias and guaranteeing a representative sample (Creswell, 2014). This method works especially well for getting a complete picture of the population. The study specifically concentrated on Letran Manila SHS students that support sustainable brand packaging. The research aimed to obtain a representative and diverse sample of students by using this method of sampling.

The target population for this study was the senior high school students of Letran Manila. A sample size of 170 students was selected with a 95% confidence level and a 5% margin of error to ensure that the results accurately represented this group. The study was conducted through survey and evaluative methods to assess consumer satisfaction with the use of sustainable packaging and to identify the factors influencing their purchasing decisions, including the considerations they made when buying products with sustainable brand packaging.

Data Collection and Analysis Procedures

Following the non-experimental research design of the study, the survey and evaluation took place at Colegio de San Juan de Letran. A structured survey was used to gather data from 170 students, who were selected to achieve a 5% margin of error and a 95% confidence level. In addition to general customer satisfaction and behavioral indicators such as buying frequency, the survey included Likert scale items to examine factors such as social norms, personal values, package design, pricing, and sustainability claims.

Once data collection was completed, the dataset was analyzed using linear regression to quantify the relationship between sustainable packaging and consumer behavior. Linear regression analysis is a statistical method used to understand and predict the relationship between two variables. It allowed the researchers to determine the potential effects of changes in one variable (the independent variable) on another (the dependent variable). The strength and direction of this relationship were indicated by the coefficient of correlation. In addition, the mean and standard deviation were computed to measure the satisfaction levels of SHS students in Letran Manila and to assess the influence of various sustainable brand packaging factors.

By using this data analysis, the researchers were able to effectively address the research questions and identify the most significant factors influencing satisfaction. The analysis also examined the relationship between various aspects of sustainable packaging and the overall satisfaction levels of SHS consumers. If the findings showed a significant impact of sustainable brand packaging on consumer satisfaction, the alternative hypothesis (H_a) was accepted. Conversely, if the findings showed no significant impact, the null hypothesis (H_0) was retained.

RESULTS AND DISCUSSION

The table below presents the profile of the research respondents. A total of 170 SHS students participated in the study, consisting of 82 Grade 11 students (48%) and 88 Grade 12 students (52%). This distribution indicates a nearly equal representation from both grade

levels, providing a balanced perspective on their level of satisfaction with sustainable packaging.

Table 1. Profile of Respondents

Grade Level	Frequency	Percentage
Grade 11	82	48%
Grade 12	88	52%
TOTAL	170	100%

The satisfaction scores with brands that utilize sustainable packaging are presented below (table 2). The satisfaction level assessment includes five distinct questions, each evaluated using mean scores and standard deviations (SD).

Table 2. Satisfaction level of SHS Students

Satisfaction Level Assessment	Mean	SD	Interpretation
How satisfied are you with the visual design and appearance of brands' recyclable packaging material	3.42	0.62	Very Satisfied
How satisfied are you with the ease of opening and using products from brands that use packaging that are designed to reduce environmental impact?	3.51	0.62	Very Satisfied
How satisfied are you with the quality of the product when its packaging is environmentally friendly?	3.51	0.63	Very Satisfied
How satisfied are you with the products that contribute to reducing environmental waste?	3.64	0.56	Very Satisfied
How satisfied are you with the cost of products that use recyclable packaging material compared to those with disposable packaging?	3.44	0.72	Very Satisfied
MEAN	3.50	0.63	Very Satisfied

The results also showed that products contributing to environmental waste reduction received the highest mean score (3.64, SD = 0.56), which is interpreted as "Very Satisfied". This high mean score for products that reduce environmental waste suggests that students place significant value on the environmental benefits of sustainable packaging. It further indicates that brands focused on reducing waste are effectively meeting student expectations. The relatively low standard deviation (SD = 0.56) suggests a more unified opinion among students regarding their satisfaction with this aspect.

In contrast, the visual design and appearance of recyclable packaging material received the lowest mean score (3.42, SD = 0.62), though it still falls within the "Very Satisfied" range. While this score indicates a high level of satisfaction, it suggests that students may prioritize other factors over design. The slightly higher standard deviation (SD = 0.62) reflects more diverse opinions among students. Other questions, such as questions related to product quality, ease of opening products, and cost of products, were also interpreted within the "Very Satisfied" range.

The overall mean score of 3.50 (SD = 0.63) indicates that, on average, SHS students are "Very Satisfied". This result implies that SHS students are highly satisfied with the visual design, ease of opening, product quality, contribution to reducing environmental waste, and cost of products from brands that use sustainable packaging.

Table 3. Influence Level Assessment

Influence Level Assessment	Mean	SD	Interpretation
I am more likely to buy from brands that use recyclable packaging materials if I see that my friends or peers do the same.	3.34	0.70	Strongly Agree
My environmental beliefs make me more likely to buy from brands that use environmentally friendly packaging.	3.49	0.65	Strongly Agree
The aesthetic appeal of recyclable packaging materials influences my choice to purchase from certain brands.	3.52	0.72	Strongly Agree
I consider the price difference of products with recyclable and single-use packaging in my buying decisions.	3.45	0.75	Strongly Agree
I am more likely to buy from brands that openly promote their commitment to using environmentally friendly packaging	3.49	0.69	Strongly Agree
MEAN	3.46	0.70	Strongly Agree

The table presented above shows the results from the influence level assessment of SHS students. The assessment includes five distinct factors which include social norms, personal values, package design, price, and sustainability claims, each evaluated using mean scores and standard deviations (SD).

The overall mean score of 3.46 (SD = 0.70) indicates that, on average, SHS student “Strongly Agree” that sustainable brand packaging factors such as: (1) social norms, (2) personal values, (3) package design, (4) price, and (5) sustainability claims, influence their purchasing decisions when buying from brands that uses sustainable packaging.

Specifically, the packaged design factor received the highest mean score of 3.52 (SD = 0.72), which is interpreted as “Strongly Agree.” This means that the aesthetic appeal of recyclable packaging materials most influences the SHS student’s choice to purchase from certain brands, compared to the other factors.

The analysis of factors influencing student purchasing decisions revealed a clear hierarchy, as detailed in Figure 3. Package Design was identified as the most influential factor, achieving the highest mean score (M = 3.52, SD = 0.62). This was followed closely by Personal Values (M = 3.49, SD = 0.65) and Sustainability Claims (M = 3.49, SD = 0.69), which were rated as equally significant. Price also emerged as a relevant factor (M = 3.45, SD = 0.75). In contrast, Social Norms exerted the least influence on purchasing decisions, receiving the lowest mean score of all factors evaluated (M = 3.34, SD = 0.70).

On the other hand, the table below shows the result of a regression analysis on the relation between students' consumer satisfaction to sustainable brand packaging. The table shows that there is a strong and significant relationship among the two variables, by the t-value (5.17), and the p-value (<.001), both of which are below the 5% significance level.

Table 4. Sustainable Brand Packaging influence to Consumer Satisfaction

Variable Independent	Variable Independent	t-Value	p-Value	Decision	Conclusion
Sustainable Packaging	Consumer Satisfaction	5.17	<.001	Reject Ho	Significant

The t-value shows a strong effect size, indicating that sustainable packaging has a significant influence on how satisfied consumers are, while the small p-value presents strong evidence against the null hypothesis. Therefore, the null hypothesis—which states that sustainable brand packaging does not significantly influence consumer satisfaction—is rejected based on the results. Hence, the alternative hypothesis is accepted—which states that sustainable brand packaging significantly influences students’ consumer satisfaction.

This means that Letran Manila SHS students' consumer satisfaction is significantly influenced by the sustainable packaging factors of sustainable brands. This emphasizes how crucial it is to implement sustainable practices in brand packaging since they appear to have a significant influence on how customers perceive sustainable packaging brands. As Thomas (2024) also points out, brands utilizing environmentally friendly packaging are perceived as more trustworthy and responsible.

Table 5. Sustainable Packaging influence

Variable Independent	Variable Independent	t-Value	p-Value	Decision	Conclusion
Social norms and personal values	Consumer Satisfaction	0.187	0.852	Do Not Reject Ho	Not Significant
Package Design		0.935	0.351	Do Not Reject Ho	Not Significant
Price		0.788	0.432	Do Not Reject Ho	Not Significant
Sustainability Claims		3.979	<.001	Reject Ho	Significant

The table shows that social norms and personal values (t=0.187; p=0.852), package design (t=0.935; p=0.351) and price (t=0.788; p=0.432) that had no apparent influence on SHS students' consumer satisfaction with sustainable packaging. However, sustainability claims (t=3.979; p<.001) have a significant influence on students' consumer satisfaction. As a result, the null hypothesis is accepted for the three factors (social norms and personal values, package design, price) and only rejected on one factor (sustainability claims).

This strong influence of sustainability claims aligns with broader consumer behavior trends in the Philippines. A 2022 Pulse Asia survey revealed that 83% of Filipinos prefer to support brands with environmentally responsible operations and products (BusinessMirror, 2023). This suggests that messages promoting sustainability such as green packaging, recyclable labels, and eco-friendly certifications are highly persuasive because they align with the public’s growing environmental awareness. Supporting this, Kantar’s 2021 “Who Cares, Who Does” report found that 75% of Filipino shoppers actively seek out brands that help reduce their environmental footprint (Kantar Worldpanel, 2021). These findings contextualize the results of the present study by showing that environmental messaging not only captures attention but also enhances consumer satisfaction when it resonates with their values.

Hence, the results of this study concludes that only sustainability claims play a significant role on consumer satisfaction among the four factors tested. Nonetheless, it is important to acknowledge that such responses may also be influenced by halo effects or social desirability bias, where consumers respond more favorably to what is seen as socially or ethically correct, rather than based on objective product attributes. It is also important to acknowledge that biases such as selection bias as the sample population may not fully represent a broader consumer population, it is only limited to the Letran senior highschool students (Carrington, Neville, & Whitwell, 2010).

CONCLUSION

Based on the results and conclusion of this study, this research concludes that the satisfaction level assessment of senior high school students regarding brands that use sustainable packaging are generally very high. The highest satisfaction was observed with products that contribute to reducing environmental waste, indicating that students highly value sustainability. While other factors like product quality, ease of opening, and cost also received positive feedback, the visual design of recyclable packaging was rated slightly lower. However, even the lowest score still reflects strong satisfaction. Overall, the senior high school students at Letran Manila are highly satisfied with the brands' sustainable packaging, which suggests that brands are meeting their environmental and product-related expectations.

The influence level assessment results indicate that senior high school students are strongly influenced by sustainable packaging when choosing brands. Among these factors, the aesthetic appeal of recyclable packaging has the biggest influence and impact, followed closely by personal values and sustainability claims. Price and social norms are also influential, though not as much as other elements and factors. Overall, students strongly agree that all the assessed factors significantly impact their purchasing decisions, which demonstrates how important sustainable packaging is in influencing the generation today.

There is a strong and significant relationship between sustainable brand packaging and consumer satisfaction among Letran Manila senior high school students. With a t-value of 5.17 and a p-value of less than 0.001, the results reject the null hypothesis, confirming that sustainable packaging does impact consumer satisfaction. This highlights the importance of using eco-friendly packaging, as it not only improves brand perception but also increases consumer trust and satisfaction.

Only sustainability claims have a significant impact on consumer satisfaction with sustainable packaging among Letran Manila senior high school students. The factors of social norms and personal values, package design, and price did not influence satisfaction, as indicated by their high p-values. However, sustainability claims, with a t-value of 3.979 and a p-value of less than 0.001, were found to significantly affect satisfaction. This supports the idea that consumers value brands that promote environmental sustainability, making sustainability claims a key factor in improving consumer satisfaction.

RECOMENDATIONS

Brands should continue to focus on enhancing the environmental benefits of their brand packaging, as this is the most valued aspect by students. They should also emphasize their commitment to sustainability in advertisements and promotions to align with students' sustainability environmental values. While the visual design of recyclable packaging may not be as highly rated, it still plays an important role and could be improved to better align with student preferences and retain consumer satisfaction.

Brands should prioritize using recyclable packaging materials with visually appealing designs to attract senior high school consumers, as well as those who support sustainable packaging. By having eye-catching designs in their sustainable packaging, brands can also capture the attention of these SHS consumers who are drawn to the packaging that aligns with their sustainability value and aesthetics preference. In addition to increasing brand satisfaction, this strategy can enhance customer loyalty among consumers who give sustainability priority.

Brands should prioritize the use of sustainable packaging, since sustainable brand packaging has a significant influence on consumer satisfaction. This recommendation is important, especially those brands that target young customers like senior high school students from Letran Manila. By doing this, brands that utilize sustainable packaging can improve consumer satisfaction by positioning themselves as responsible companies that give importance to both environmental and consumer satisfaction.

Brands utilizing sustainable packaging should be more vocal with its sustainability claims. Since sustainability claims have a significant impact on Letran Manila's senior high school students' consumer

satisfaction, brands should highlight their eco-friendly motives in their marketing strategies and promotions. By doing so, brands can further improve the satisfaction level of senior high school students, especially those who are environmentally conscious consumers.

Additionally, it is recommended that brands should improve the aesthetic appeal of their sustainable packaging. Based on the conclusions, it was stated that aesthetic appeal received the lowest mean score in the satisfaction level assessment, despite being highly prioritized and interpreted as the most influential factor on influence level assessment. Hence, brands should further enhance the packaged designs of sustainable packaging to have higher consumer satisfaction.

It is also recommended for future researchers to be more specific when evaluating brands that utilize sustainable packaging in terms of the sustainable packaging factors. Hence, future researchers should now source specific brands in order to have more specific data on how really influential the sustainable packaging factors are in consumer satisfaction.

Lastly, future researchers could expand the sample size and its demographics to further generalize results. They could also incorporate open-ended questions on the survey questionnaires to integrate qualitative insights that could strengthen the overall study.

REFERENCES

- Baždarić, K., Šverko, D., Salarić, I., Martinović, A. and Lucijanić, M. (2021). The ABC of linear regression analysis: What every author and editor should know, 47. doi: 10.3897/ese.2021.e63780
- Bevans, R.(2023). Simple Linear Regression | An Easy Introduction & Examples. Scribbr. <https://www.scribbr.com/statistics/simple-linear-regression/>
- Boz, Z., Korhonen, V., Koelsch Sand, C. (2020). Consumer Considerations for the Implementation of Sustainable Packaging: A Review. Sustainability, 12(6), 2192; <https://doi.org/10.3390/su12062192>
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. Journal of Business Ethics, 97(1), 139–158. <https://doi.org/10.1007/s10551-010-0501-6>
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.). SAGE Publications. <https://doi.org/10.5539/elt.v12n5p40>
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Lawrence Erlbaum Associates. <https://doi.org/10.4324/9780203771587>
- Dena, A., Honrado, L., Mica Lin, P., & Dotong, E. (2023). Promoting the Usage of Eco-Friendly Tertiary Packaging: A Market Research on the Perceived Behavior of Filipino Consumers Based on Sustainability Factors. American Journal of Social Development and Entrepreneurship, 2(1), 26–31. <https://doi.org/10.54536/ajsde.v2i1.1223>
- Digital, L. (n.d.). Trivium Packaging | 2021 Buying Green Report. <https://www.triviumpackaging.com/news-media/reports/2021-buying-green-report/>
- Dobson, M.(2024, November 22). What is sustainable packaging? GWP Group. <https://www.gwp.co.uk/guides/what-is-sustainable-packaging/>
- Gleim, M. R., Smith, J. S., Andrews, D., & Cronin, J. J. (2013). Against the green: A multi-method examination of the

- barriers to green consumption. *Journal of Retailing*, 89(1), 44–61. <https://doi.org/10.1016/j.jretai.2012.10.001>
- Holbrook, M. B. (1999). Consumer value. A framework for analysis and research. https://mycourses.aalto.fi/pluginfile.php/1573229/mod_folder/content/0/Holbrook%20%281999%29.pdf
- Kautish, Pradeep., & Dash, Ganesh. (2017). Environmentally concerned consumer behavior: evidence from consumers in Rajasthan. *Journal of Modelling in Management*, 12, 712–738 <http://doi.org/10.1108/JM2-05-2015-0021>
- Ketelsen, M., Janssen, M., Hamm, U., (2020) Consumers' Response to Environmentally-Friendly Food Packaging—A Systematic Review. *J. Clean. Prod.* 254, 120123. <https://doi.org/10.1016/j.jclepro.2020.120123>
- Lakatos, E. S., Nan, L. M., Bacali, L., Ciobanu, G., Ciobanu, A. M., & Cioca, L. I. (2021). Consumer Satisfaction towards Green Products: Empirical Insights from Romania. *Sustainability*, 13(19),10982. <https://doi.org/10.3390/su131910982>
- Montes (2022), Study on the Impact of Green Cosmetic, Personal Care Products, and their Packaging on Consumers' Purchasing Behavior in Luzon,Philippines. <https://ieomsociety.org/proceedings/2022orlando/27.pdf>
- Sansom, R. (2021). Theory of planned behavior. *Change Theories Collection*. https://ascnhighered.org/ASCN/change-theories/collection/planned_behavior.html
- Schwartz, S. H. (2006). Basic human values: An overview. https://uranos.ch/research/references/Schwartz_2006/Schwartzpaper.pdf
- Thomas, D. (2024). How sustainable packaging influences consumer behavior | C.L. Smith. C.L. Smith. <http://surl.li/uonmeh>
- Van Doorn, J., & Verhoef, P. C. (2015). Drivers of and barriers to organic purchase behavior. *Journal of Retailing*, 91(3), 436–450. <https://doi.org/10.1016/j.jretai.2015.02.003>
- What is Influencing Factors | IGI Global Scientific Publishing.(n.d.). <https://www.igi-global.com/dictionary/influencing-factors/47914>
- Woźniczko, M. (2024, September 4). Packaging design: the forgotten marketing medium. Packhelp. <https://packhelp.com/packaging-design/#:~:text=%E2%80%9CPackaging%20design%20is%20the%20connection,a%20product%20suitable%20for%20marketing.%E2%80%9D>
- Zauner, A., Monika Koller, M., & Hatak, I. (2015). Customer perceived value—Conceptualization and avenues for future research. *Cogent Psychology*. <http://dx.doi.org/10.1080/23311908.2015.1061782>
- Zhao, X., Huo, J., & Zhang, Q.(2020). The impact of customer satisfaction on customer loyalty: A study of the mobile phone industry in China. *Journal of Business Research*, 118, 132–139. <https://doi.org/10.1016/j.jbusres.2020.07.039>