JGB 1645

Kapampangan Gen Z's Attitude and Behavior towards Sustainable Packaging

Charlize Adrienne E. Nabung, Ji-An B. Badian, Marilou D. Concepcion,

Ma. Camille S. Dimasangal, Mikaela Coleen R. Nunag,

Denzel Angelo L. Salunga & Danzen B. Olazo

Holy Angel University

charlizeadriennenabung@gmail.com, jbbadian@student.hau.edu.ph,
mdconcepcion@student.hau.edu.ph, msdimasangal@student.hau.edu.ph,
mrnunag@student.hau.edu.ph & dlsalunga@student.hau.edu.ph

Abstract

Nowadays, sustainable packaging is extensively employed in various enterprises and organizations. Sustainable packaging is used because it helps to minimize carbon footprints, prevent the existing state of the environment from deteriorating, and enhance the environment's overall condition. This study aims to investigate Kapampangan Gen Z's perceptions of sustainable packaging awareness and responsiveness by identifying their variables and assessing the influence of these factors on their purchase of products with sustainable packaging. A purpose and snowball sampling method through an online survey was conducted. The result shows that environmental concern, subjective norms, and perceived behavioral control significantly impact purchase intention. However, the attitude had no discernible impact on purchase intention. The link between purchase intention, purchase behavior, and willingness to pay is the same. This implies that Kapampangan Gen Z cares deeply about environmental conservation, but there is a disconnect between what they claim they want to do (purchase

intention) and what they do (purchase behavior). Thus, there is a need for business owners and marketers to consider increasing the availability and accessibility of products with sustainable packaging to expand their market and lower customers' perceived barriers to purchase. SMEs should consider using sustainable packaging as an alternative to plastic. Future studies can build on the conclusions of this study by focusing on additional factors, various age groups, and other locations.

Keywords: Kapampangan Gen Z, sustainable packaging, environmental concern, attitude, subjective norms, perceived behavioral control, purchase intention, willingness to pay, purchase behavior

Introduction

The increase in global plastic production has become a testament to economic degradation and human advancement. Wu et al. (2021) stated that it accounts for "...approximately 450 million metric tons of annual production." Considering that most plastics are very light, this is highly concerning. The use of single-use plastics, in particular, poses a threat to the environment that could be avoided or even mitigated using materials that do less harm to the environment. A company can choose to implement an approach to try and mitigate the problem through the use of sustainable packaging, which was made purely, or at least some part, through recycled or repurposed materials. Being sustainable entails that the brand acknowledges the fact that plastic pollution is a real thing and it is a genuine problem that must be addressed.

Considering that the Philippines is touted to be the third-largest contributor of plastic waste to the ocean and 0.28 to 0.75 million tons of plastic enter the oceans each year through the

coastal areas (2020), then we start to see the actual damage that the Philippines causes through the utilization and improper disposal of plastics. With this in mind, Ling (2013) stated, "DOST researchers developed biodegradable food packaging material made of locally sourced starch and clay in 2013." In this regard, communities are aware of the damaging effects of plastics and are trying to develop a way to fix them.

Based on the studies above, there is still a limited understanding of the mindfulness and receptiveness of consumers towards sustainable packaging across countries, including the Philippines (Jochems & Schol, 2020). Different factors of consumers' attitudes and behavior towards purchasing sustainable packaging may be identified, but their interrelationships are uncertain, especially in the Philippines. Studies related to consumers' attitudes and behavior on purchasing sustainable packaging, which focus on Kapampangan Gen Z, are also limited, or there are none. Therefore, conducting this study fills these research gaps to have a better understanding of this matter in the Philippine context, specifically on Kapampangan Gen Z. Thus, conducting this study has the primary purpose of acquiring a better understanding of the perception of Kapampangan Gen Z toward sustainable packaging by scrutinizing their awareness and response to it. This aims to identify the factors of Kapampangan Gen Z's attitude and behavior influencing their purchase intention toward sustainable packaging. It also aims to determine the impact of these factors on their purchase of products with sustainable packaging.

Review of Related Literature

Kapampangan Gen Z's

Individuals born in Pampanga province are referred to as "Kapampangans" (Mirikitani, 1972). Generation Z (Gen Z) refers to those born after 1996. They are currently aged 10 to 25 (Kasasa, 2021). Gen Z is noted for being socially conscious, more environmentally sensitive

than prior generations, and concerned about sustainability. As a result, they prefer to buy sustainable brands and are willing to pay 10 percent extra for sustainable goods (Ali et al., 2019).

Environmental Concern

According to Bulut et al. (2021), environmental concern means being concerned with the protection of the environment that enables people to live. Furthermore, Gen Z's high concern for protection and a better environment drives them to pursue their purchase intentions and behavior for sustainable products.

Attitude

Kalsoom (2018) defined attitude as the result of experience or upbringing, which can have a powerful influence on behavior. Furthermore, attitude change regarding sustainable development is about developing concern and feeling for the planet earth and the life on it.

Subjective Norms

Subjective norms are a person's thoughts about whether or not peers and essential individuals in one's life believe he or she should engage in particular conduct (LaMorte, 2019). Younger generations worldwide are more prone to feel ashamed of maintaining unhealthy and ecologically unfriendly lifestyles. Thus they are more interested in changing their habits to become more sustainable in their everyday lives (Hassim, 2021).

Perceived Behavioral Control

Perceived Behavioral Control pertains to a person's belief in his or her capacity to do a specific behavior (Ajzen, 2020). According to Ahmed et al. (2021), environmentally concerned consumers are more willing to acquire sustainable goods if they believe they have adequate influence over their selections.

Purchase Intention

The urge to acquire environmentally friendly items is known as "green purchase intention" (Rizwan et al., 2014). Consumers are becoming increasingly environmentally aware, leading them to prefer sustainable products. As a result, the desire to buy something green predicts one's attitude toward environmental action (Bautista, 2019).

Willingness to Pay

A person's maximum amount of money to spend is called willingness to pay (Mbachu et al., 2018). Despite the high costs connected with the manufacturing process, which frequently makes eco-friendly things more expensive, Gen Zs are willing to spend on sustainable items because they care about the environment and prioritize it over their convenience (Shen, 2012).

Consumer Purchase Behavior

Consumer purchase behavior is the need to cover the selection, purchasing, and consumption of goods and services to meet one's needs and desires (Ramya, 2016). One's attitude influences it. Thus people with a good attitude toward eco-social advantages and environmental challenges are more likely to engage in green purchasing behavior (Cheung & To, 2019).

Sustainable Packaging

Boz et al. (2020) define sustainable packaging as materials that are sustainably sourced, or that can be recovered, such as recyclable or biodegradable materials. Nikolić et al. (2022) stated that Gen Z's attitude and ecological behavior on sustainable products have a relatively significant solid relationship. Since they know which companies produce recycled goods and have a favorable interest in protecting the environment, they are more inclined to raise awareness and take immediate action to save the environment.

Consumer's Attitude and Behavior towards Purchasing Sustainable Packaging

The study of consumer behavior towards sustainable packaging is still in its infancy. Some researchers used different models to explain variance in consumer behavior from an environmental perspective. Chaudhary and Bisai (2018) developed a suitable model for understanding millennial green purchase behavior. According to this model, four out of five independent variables significantly affected green purchase behavior. Environmental knowledge and attitudes, subjective norms, perceived benefits, and consumer innovativeness positively relate to green purchase behavior, whereas perceived barriers harm it. The results indicate that overall consumer innovativeness has the highest positive impact on the green purchase behavior of Indian millennials, followed by environmental knowledge and attitude, subjective norms, and perceived benefits, respectively. Perceived barriers have the most substantial direct negative influence on green purchase behavior.

Framework

The study's conceptual framework was adopted from the study of Chaudhary and Bisai (2018). It supposes that Kapampangan Gen Z's environmental concerns affect their attitude, subjective norms, and perceived behavioral control towards their purchase intention for sustainable packaging, which then affects their purchase behavior. Furthermore, it supposes that willingness to pay moderates the relationship between purchase intention and purchase behavior. The framework lays forth the following hypotheses of the study, which were derived from critical results in the adopted literature:

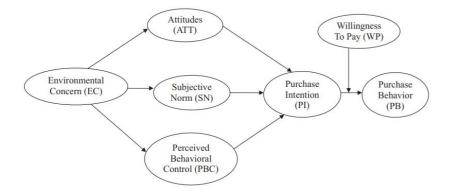
H1. There is a significant positive influence between Kapampangan Gen Z's environmental concern and their attitude toward sustainable packaging.

- **H2.** There is a significant positive influence between Kapampangan Gen Z's environmental concern and their subjective norms on sustainable packaging.
- **H3.** There is a significant positive influence between Kapampangan Gen Z's environmental concern and their perceived behavioral control towards sustainable packaging.
- **H4.** There is a significant positive influence between Kapampangan Gen Z's attitude and their purchase intention toward sustainable packaging.
- **H5.** There is no significant positive influence between Kapampangan Gen Z's subjective norms and their purchase intention toward sustainable packaging.
- **H6.** There is a significant positive influence between Kapampangan Gen Z's perceived behavioral control and their purchase intention toward sustainable packaging.
- **H7.** There is a significant positive influence between Kapampangan Gen Z's environmental concern and their purchase intention toward sustainable packaging.
- **H8.** There is a significant positive influence between Kapampangan Gen Z's purchase intention and their purchase behavior towards sustainable packaging.
- **H9.** Willingness to pay significantly influences the relationship between purchase intention and purchase behavior towards sustainable packaging.

Conceptual Framework

Figure 1

Conceptual Framework adopted from the study of Chaudhary and Bisai (2018)



Methodology

This study utilized correlational and descriptive-causal research designs. The study respondents consisted of Kapampangan Gen Z's—people born within the province of Pampanga aged 18 to 25. Fourteen municipalities in Pampanga were represented in this study. Using G*Power, a total sample size of 146 was calculated, with a 5% margin of error and a 95% confidence level. Purposive sampling targeted respondents who were identified as Kapampangan Gen Zs. Respondents were screened according to their geographic location. This allows them to focus on a population with the same interests as the study findings. In addition, snowball sampling was used to seek assistance from the participants to look for possible respondents qualified for the study. Regarding location, the criteria for inclusion were asked if they were born in the province of Pampanga. Those who responded "No" were eliminated.

An online survey questionnaire was utilized and adopted from the study of Chaudhary and Bisai (2018). This was used to create Google Forms with a 5-point Likert scale, where one

strongly disagrees, and five strongly agree. Social media platforms like Twitter and Instagram, primarily Facebook, were the primary contact sources to disseminate the forms to target respondents.

Pre-testing with 30 respondents was conducted to determine the robust reliability and validity of the adopted research instrument. The overall Cronbach's Alpha was 95.5%, indicating high consistency and excellent reliability. The Jamovi software was utilized to analyze the study's findings, and the following tests were conducted: (1) Descriptive Statistics, (2) Mean and Standard Deviation of Construct, (3) Regression Analysis, and (4) Moderation Analysis.

Discussion of Results

Descriptive Statistics

Table 1

Demographic profile of respondents

Characteristics	Item	Mean	SD	Frequency	Percent
Age		21.30	2.14		_
Sex	Male			68	46.6
	Female			78	53.4
	Total			146	100

Table 1 indicates the descriptive statistics of the respondents. Seventy-eight were females (53.4%), and 68 were males (46.6%). The mean age was 21.30, with a Standard Deviation of 2.14. Kim et al. (2020) said, "To capture a bigger share of the Generation Z wallet, sustainable products need to speak to quality as well as environmental values." Seeing that the respondents are freshly out of their teenage years yet are still not old enough for most of them to have completed their schooling years and, thus, have jobs, they have the most opportunity to denounce company packaging behaviors than their constituent respondents.

Mean and Standard Deviation of Construct

 Table 2

 Construct mean and standard deviation

			G 1 12	** 1 1
Construct	Mean	SD	Cronbach's	Verbal
	-	_	α	Interpretation
Environmental Concern	4.79	0.394	0.939	Highly Influenced
EC1: I am very concerned about the environment	4.75	0.548	0.939	
EC2: I would be willing to reduce my consumption to help protect the environment	4.73	0.505	0.940	
EC3: Major social changes are necessary to protect the natural environment	4.82	0.418	0.940	
EC4: Anti-pollution laws should be enforced more strongly	4.86	0.439	0.939	
Attitude	4.80	0.417	0.939	Highly Influenced
ATT1: I like the idea of purchasing products packed with sustainable materials	4.85	0.460	0.940	
ATT2: Purchasing products packed with sustainable materials is a good idea	4.84	0.435	0.940	
ATT3: I have a favorable attitude towards purchasing a version of a product packed with sustainable materials	4.71	0.550	0.939	
Subjective Norms	4.15	0.752	0.937	Quite Influenced
SN1: Most people who are important to me think I should purchase products with sustainable packaging when going to purchasing	4.04	0.893	0.938	
SN2: Most people who are important to me would want me to purchase products with sustainable packaging when going to purchasing	4.02	0.875	0.938	
SN3: People whose opinions I value would prefer that I purchase products with sustainable packaging	4.14	0.836	0.939	
SN4: My friend's positive opinion influences me to purchase products with sustainable packaging	4.40	0.739	0.939	
Perceived Behavioral Control	4.59	0.508	0.937	Highly Influenced
PBC1: I believe I can purchase products packed with sustainable materials	4.60	0.569	0.938	

PBC2: If I were entirely up to me, I am confident that I would purchase products packed with sustainable materials	4.58	0.630	0.938	
PBC3: I see myself as capable of purchasing products packed with sustainable materials in the future	4.68	0.511	0.938	
PBC4: I have the resources, time, and willingness to purchase products packed with sustainable materials	4.50	0.697	0.938	
Purchase Intention	4.59	0.485	0.937	Highly Influenced
PI1: I will consider buying products with sustainable packaging because they are less polluting in the coming times	4.70	0.517	0.939	v
PI2: I will consider switching to brands with sustainable packaging for ecological reasons	4.58	0.641	0.938	
PI3: I plan to spend more on environmentally friendly products rather than conventional products	4.34	0.728	0.937	
PI4: I expect to purchase products with sustainable packaging in the future because of their positive environmental contribution	4.63	0.563	0.938	
PI5: I want to purchase products with sustainable packaging in the near future	4.71	0.538	0.939	
Willingness to Pay	4.48	0.613	0.937	Highly Influenced
WP1: I would pay more for a product with sustainable packaging that is making efforts to be environmentally sustainable	4.49	0.667	0.938	
WP2: I would be willing to pay this extra percentage on products with sustainable packaging to support the organization's/product efforts to be environmentally sustainable	4.42	0.722	0.938	
WP3: I feel proud to have environmentally friendly products in my house though they are more costly than conventional products	4.51	0.677	0.937	
Purchase Behavior	3.27	1.136	0.941	Moderately Influenced
PB1: I have been purchasing products with sustainable packaging regularly	3.34	1.205	0.942	
PB2: I have green purchasing behavior for my daily needs' products	3.37	1.180	0.942	
PB3: I have had green purchasing behavior over the past six months	3.10	1.205	0.943	

Table 2 shows the average mean rating of the six factors influencing Kapampangan Gen Z's attitude and behavior towards purchasing sustainable packaging. **Environmental concern** (\bar{x} =4.79, SD=0.349) was *highly influenced* if they showed concerns for protecting the environment. The Kapampangan is one of the most environmentally conscious people in the country, which has inspired many to start and organize environmental awareness programs and campaigns in the province. Furthermore, they recognize the benefits of using recycled materials as much as possible, which drives them to support sustainable packaging (Cadiogan, 2021). **Attitude** (\bar{x} =4.80, SD=0.417) was *highly influenced* if they had a favorable attitude to sustainable materials. Prakash and Pathak (2017) asserted that attitude towards the product or service influences consumer purchase behavior. This denotes that a person with a positive attitude toward sustainable packaging will most likely purchase products with sustainable packaging.

Subjective norms (\bar{x} =4.15, SD=0.752) were *quite influenced* if people approve of their behavior in purchasing sustainable materials. According to Ajzen (2015), consumers would likely buy sustainable packaging if they have a favorable opinion towards it and perceive those others are buying it. This is because people's attitudes can affect the behavior of others. In this case, Kapampangan Gen Z's positive attitude towards sustainable packaging causes them to positively perceive other people's views and opinions on purchasing sustainable packaging.

Perceived behavioral control (\bar{x} =4.59, SD=0.508) was *highly influenced* if they believe they can accomplish their behavior with sustainable materials. Kainuwa et al. (2013) stated that people's attitudes and behaviors depend on their background, education, socio-economic status, and personal experiences. If there is a high subjective norm regarding purchasing sustainable packaging, they have high perceived behavioral control towards purchasing sustainable

packaging. Thus, it is essential to understand how these variables interact to create effective strategies for different generations. **Purchase intention** (\bar{x} =4.59, SD=0.485) was *highly influenced* if they showed a desire to buy sustainable goods. According to Taufique et al. (2017), this implies that if the Kapampangan Gen Z's attitude towards purchasing sustainable packaging is positive, it will affect their behavior towards it, eventually driving their purchase intention to buy products with sustainable packaging.

Furthermore, as the Gen Z population grows, they have become more aware of environmental issues, and their choices in purchasing products can directly affect addressing these concerns. Willingness to pay (\bar{x} =4.48, SD=0.613) was *highly influenced* if they were willing to pay more for sustainable goods. Consumers are more aware of their purchasing decisions for sustainable packaging products due to their environmental benefits. As a result, manufacturers are starting to follow suit by shifting towards sustainable packaging production. Respondents are willing to pay more for sustainable packaging products because they are concerned for the environment (Orzan et al., 2018). Lastly, **purchase behavior** (\bar{x} =3.27, SD=1.136) was *moderately influenced* if they had been practicing buying sustainable goods. Kardos et al. (2019) found that Gen Zs are more responsive to sustainable packaging than other generations.

Furthermore, they are more likely to consider the environmental impact of their purchase decisions. In this light, it is necessary to understand how actions by consumers can be influenced through different means, such as packaging and advertising. The impact of a consumer's environmental concern, attitude, subjective norms, perceived behavioral control, and willingness to pay a premium have congruence that consumers will likely purchase sustainable products (Yadav & Pathak, 2017).

Regression Analysis

Table 3Model fit measures – EC on ATT, SN, PBC

			Overall Model Test			
Model	R	\mathbb{R}^2	F	df1	df2	p
EC-ATT	0.605	0.366	83.0	1	144	< .001
EC-SN	0.245	0.0601	9.21	1	144	0.003
EC-PBC	0.589	0.347	76.6	1	144	< .001

Note: EC = Environmental Concern, ATT = Attitude, SN = Subjective Norms, PBC = Perceived Behavioral Control

Model Coefficients - AVEEC

	Predictor	β	SE	t	р	Decision
Ī	AVEATT	0.639	0.0702	9.11	< .001	Accept H1
	AVESN	0.468	0.154	3.04	0.003	Accept H2
	AVEPBC	0.760	0.0868	8.75	< .001	Accept H3

Note: AVEEC = Average Economic Concern, AVEATT = Average Attitude, AVESN = Average Subjective Norms, AVEPBC = Average Perceived Behavioral Control

Table 3 presents the stepwise regression analysis of environmental concern on attitude $(\beta=0.639, p<.001)$, subjective norms $(\beta=0.468, p=0.003)$, and perceived behavioral control $(\beta=0.760, p<0.001)$. Consequently, the decision was to accept H1, H2, and H3, respectively. This supports the following studies: Auliandri et al. (2018), the consumer's degree of concern for the protection and condition of the environment encourages consumers to have a green attitude. Furthermore, inward environmental attitude, a person's concern towards the abuse of the environment, molds or shapes consumers to develop their purchase intention towards green products. De Leeuw et al. (2015), subjective norms influence adolescents to be involved with protecting the environment, which implies that "what others do to protect the environment is more important than what they say." In addition, parents', families', and friends' behaviors toward their concern for the environment play a vital role for these adolescents to do the same.

Lastly, according to Rezai et al. (2013), behavioral control is vital in raising awareness and concern about turning green. Customers' purchases of environmentally friendly products are influenced by perceived behavioral control, leading to a desire to buy sustainable packaging. This indicates that Kapampangan Gen Z is concerned about current environmental challenges and recognizes its environmental duty by practicing and purchasing sustainable packaging.

Table 4

Model fit measures – ATT, SN, PBC on PI

				Overall Model Test			
Model	R	\mathbb{R}^2	F	df1	df2	p	
ATT, SN, PBC–PI	0.765	0.568	67.0	3	142	< .001	

Note: ATT = Attitude, SN = Subjective Norms, PBC = Perceived Behavioral Control, PI = Purchase Intention

Model Coefficients – AVEPI

Predictor	β	SE	t	р	Decision
AVEATT	0.2211	0.0817	2.707	0.008	Reject H4
AVESN	-0.0215	0.0408	-0.527	0.599	Reject H5
AVEPBC	0.6169	0.0746	8.266	< .001	Accept H6

Note: AVEPI = Average Purchase Intention, AVEATT = Average Attitude, AVESN = Average Subjective Norms, AVEPBC = Average Perceived Behavioral Control

Table 4 presents the linear regression analysis of attitude (β =0.2211, p=0.008), subjective norms (β =-0.0215, p=0.599), and perceived behavioral control (β =0.6169, p<.001) on purchase intention. Consequently, the decisions were to reject H4 and H5, and to accept H6, respectively. This supports the following studies: Hinojosa et al. (2017), attitudes are not always strong enough to influence behavior, and when people's attitudes do not align with their behavior, they will experience cognitive dissonance. Thus, to avoid cognitive dissonance, people will try to change their attitudes to be consistent with their behavior. However, it could be argued that this

hypothesis is false. Some people believe that attitude is crucial because they think attitude is responsible for changing people's buying behavior. Without an appropriate attitude, there will be no change in people's perception and hence no change in purchase intention (Chen, 2020).

Belgiawan (2017), subjective norms can be further decomposed into injunctive and descriptive social norms. Injunctive social norms reflect what kind of behavior is perceived as appropriate or inappropriate in a particular group. Descriptive social norms capture information regarding how members of the reference group behave. Thus, injunctive and descriptive norms have a significant relationship with purchase intentions. The findings of this study then have important implications for marketers who wish to make sustainable packaging products more attractive to consumers by enhancing the perceived normative value of such products. Lastly, Ajzen (2020), people's behavior is determined by their intentions, which depend on their attitudes toward the behavior, subjective norms, and perceived behavioral control. For instance, if consumers perceive that it is easy to choose recycled products over non-recycled products, then there will be a high probability of choosing recycled products as they have a higher intention to do so.

Table 5Model fit measures – EC on PI

				Overall Model Test				
Model	R	\mathbb{R}^2	F	df1	df2	p		
EC-PI	0.687	0.471	128	1	144	< .001		

Note: EC = Environmental Concern, PI = Purchase Intention

Model Coefficients - AVEPI

Predictor	β	SE	t	р	Decision
AVEEC	0.845	0.0745	11.33	< .001	Accept H7

Note: AVEPI = Average Purchase Intention, AVEEC = Average Environmental Concern

Table 5 presents the linear regression analysis of environmental concern on purchase intention (β =0.845, p<.001). Consequently, the decision was to accept H7. Environmental concern is "the degree to which individuals are motivated by environmental issues and drive their responsibility for these issues" (Hamari et al., 2016). The findings then support that actions can make a difference in protecting the environment. According to the study of Schanes and Gözet (2018), if people are concerned about the issue of sustainable packaging, then they will try to avoid unnecessary waste from production and reduce the impacts of environmental issues. Therefore, if people are concerned about the environment, they buy more sustainable packaging.

Table 6Model fit measures – PI on PB

	-	-		Overall M	Iodel Test	
Model	R	\mathbb{R}^2	F	df1	df2	p
PI–PB	0.196	0.0384	5.76	1	144	0.018

Note: PI = Purchase Intention, PB = Purchase Behavior

Model Coefficients – AVEPB

Predictor	β	SE	t	р	Decision
AVEPI	0.459	0.191	2.40	0.018	Reject H8

Note: AVEPB = Average Purchase Behavior, AVEPI = Average Purchase Intention

Table 6 presents the linear regression analysis of purchase intention on purchase behavior $(\beta=0.459, p=0.018)$. Consequently, the decision was to reject H8. This implies that there may exist a gap between what consumers say they intend to do and what they do (Wee et al., 2014). Thus, supporting the study of Yadav and Pathak (2017), consumers buy products with good intentions, but their actual behavior does not support their purpose. For example, consumers may intend to buy environmentally friendly products, but when faced with a choice at the point of sale, they opt for conventional products due to price concerns or other factors.

Moderation Analysis

Table 7Moderation estimates – AVEPB

Construct	β	SE	Z	p	Decision
AVEPI	0.423	0.235	1.80	0.072	No significant
AVEWP	0.287	0.149	1.93	0.053	moderation –
AVEPI * AVEWP	0.448	0.278	1.61	0.107	Reject H9

Note: AVEPI = Average Purchase Intention, AVEWP = Average Willingness to Pay, AVEPB = Average Purchase Behavior

Table 7 presents the moderating effect of willingness to pay on the relationship between purchase intention and purchase behavior (β =0.423, p=0.072; β =0.287, p=0.053; β =0.448, p=0.107). Consequently, the decision was to reject H9. This means there is no substantial evidence that Kapampangan Gen Z's willingness to pay fills the abovementioned gap. This contradicts most studies that state consumers are willing to pay more if they can acquire sustainable goods (Chaudhary & Bisai, 2018). Furthermore, it contradicts that price is not considered an obstacle in acquiring environmental products even for its benefits to the environment (Prakash & Pathak, 2017).

Conclusions

Thus, the paper concludes that environmental concern, subjective norms, and perceived behavioral control favor Kapampangan Gen Z's purchase intentions for sustainable packaging. It indicates that customers are aware of sustainable packaging and care about environmental conservation. People around them heavily impact their shopping decisions on sustainable items (Alavijeh et al., 2018). It also demonstrates that people aim to purchase sustainable packaging if

they feel they have the potential to achieve their behavior by acquiring sustainable materials and being environmentally friendly (Katt & Meixner, 2020). However, the variable attitude manifested itself and indicated the contrary. The same findings were found between purchase intention and purchase behavior, and willingness to pay acting as a mediator between the two. This indicates that despite their environmental concerns and plans to purchase sustainable items, respondents lack the motivation to change their attitude on purchasing products with sustainable packaging. One aspect contributing to this is consumers' unwillingness to pay more for sustainable items. Sustainable products are frequently more expensive due to the significant costs of manufacturing, from raw materials to certification (Ling, 2013). Therefore, as stated by Olson (2013), consumers prefer more conventional products to sustainable products due to higher prices, reduced quality, and/or performance. Instead of valuing the good environmental benefits and impacts of sustainable packaging, they value the convenience of purchasing what is cheaper.

The findings of this study may aid firms in developing packaging that meets customer requirements while also saving the environment. The researchers aim to use the findings of this study to help businesses and brands better understand Kapampangan Gen Z's attitudes and behaviors when purchasing sustainable packaging, allowing them to develop better marketing strategies. Marketers could consider concentrating their marketing efforts on the correct target segment, those who are most likely to respond positively to environmental protection and have high green purchasing intention and behavior. They should explore increasing the availability and accessibility of purchasing products with sustainable packaging to expand markets for these products and lower customers' perceived barriers to purchase. They should also consider focusing on creating a positive image of sustainable products through better advertisements, proclaiming the usability and benefits of sustainable goods to change consumer attitudes and

increase their willingness to pay for such items, driving them to make purchases in the real world. Government agencies, the Department of Environment and Natural Resources (DENR) and the Department of Trade and Industry (DTI), can also assist in the broad promotion and commercialization of sustainable packaging and its advantages. Particularly, they should consider creating campaigns and commercials highlighting the state of the environment's degradation and individuals' contributions to improving environmental quality, raising people's environmental awareness and concern, and resulting in a shift in consumer behavior toward green consumption. Finally, SMEs should consider sustainable packaging as an alternative to plastic packaging for their products. In digital marketing, they should consider highlighting the environmental benefits of sustainable packaging through their various social media channels to promote awareness about sustainable packaging and environmental preservation.

Limitations and Recommendations for Future Researchers

This study is limited to the Kapampangan. This signifies that the target respondents were persons born in the Pampanga provincial area. Thus, future researchers should consider researching respondents from provinces other than Pampanga to gain new information about people's attitudes and behavior toward sustainable packaging. Future researchers may also continue to study the Kapampangan, but they may consider representing particular municipalities in Pampanga since people from other places have different cultures, lifestyles, and the like. The research is also confined to Gen Zs ages 10 to 25. Respondents began at the legal age of 18 years old, owing to ethical reasons. Future researchers may also want to look at other age groups in Pampanga to learn and understand more about Kapampangan's attitudes on sustainable packaging. They may target Gen X or the Baby Boomers. The variables investigated in this study are only those taken from Chaudhary and Bisai (2018). Therefore, other variables that can be

examined should be considered by future researchers for better and more comprehensive knowledge of consumers' views and behavior on purchasing sustainable packaging. For instance, a comparative study between the human sexes determines who has a more positive attitude and is more inclined to purchase sustainable packaging. Another would be evaluating additional factors like green trust, product features, and green product availability. Lastly, future researchers may consider formulating a response matrix for more comprehensive results and discussions other than categorizing the variables by rank. Moreover, they may consider including qualitative procedures and analysis by conducting interviews and/or creating Focus Group Discussion (FGD) for more justified and authentic results.

References

- Ahmed, N., Li, C., Khan, A., Qalati, S. A., Naz, S., & Rana, F. (2021). Purchase intention toward organic food among young consumers using the theory of planned behavior: role of environmental concerns and environmental awareness. *Journal of Environmental Planning and Management*, 64(5), 796-822. https://doi.org/10.1080/09640568.2020.1785404.
- Ajzen, I. (2015). Consumer attitudes and behavior: the theory of planned behavior applied to food consumption decisions. *Italian Review of Agricultural Economics*, 70(2), 121-138. 10.13128/REA-18003.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324. https://doi.org/10.1002/hbe2.195.
- Alavijeh, M. R. K., Esmaeili, A., Sepahvand, A., and Davidaviciene, V. (2018). The Effect of Customer Equity Drivers on Word-of-Mouth Behavior with Mediating Role of Customer Loyalty and Purchase Intention. *Inžinerine Ekonomika-Engineering Economics*, 29(2), 236–246. https://doi.org/10.5755/j01.ee.29.2.17718.

- Ali, H., Khan, E., & Ilahi, I. (2019). Environmental chemistry and ecotoxicology of hazardous heavy metals: environmental persistence, toxicity, and bioaccumulation. *Journal of chemistry*.
- Auliandri, T. A., Thoyib, A., Rohman, F., & Rofiq, A. (2018). Does green packaging matter as a business strategy? Exploring young consumers' consumption in an emerging market.

 *Problems and Perspectives in Management, 16(2), 376-384. https://doi.org/10.21511/ppm.16(2).2018.34.
- Bautista, R. A. (2019). Green behavior and generation: A multi-group analysis using structural equation modeling. *Asia-Pacific Social Science Review*, 19(1), 1-16. https://animorepository.dlsu.edu.ph/faculty_research/3354.
- Belgiawan, P. F., Schmöcker, J. D., Abou-Zeid, M., Walker, J., & Fujii, S. (2017). Modelling social norms: A case study of students' car purchase intentions. *Travel Behaviour and Society*, 7, 12-25. https://doi.org/10.1016/j.tbs.2016.11.003.
- 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.
- Bulut, C., Nazli, M., Aydin, E., & Haque, A. U. (2021). The effect of environmental concern on conscious green consumption of post-millennials: the moderating role of greenwashing perceptions. *Young Consumers*, Vol. 22 No. 2, pp. 306-319. https://doi.org/10.1108/YC-10-2020-1241.
- Cadiogan, D. J., Dy, S. C. H., Opaco, C. J. L. T., Rodriguez, R. D., Tan, J. T. T., Villanueva, K. A., & Mercado, J. M. T. (2021). Manyisig: The culinary heritage significance of Sisig in

- Angeles City, Pampanga, Philippines. *International Journal of Gastronomy and Food Science*, 24, 100347. https://doi.org/10.1016/j.ijgfs.2021.100347.
- Chaudhary, R., & Bisai, S. (2018). Green buying behavior in India: an empirical analysis. *Journal of Global Responsibility*. Doi:10.1108/JGR-12-2017-0058.
- Chen, M. F. (2020). The impacts of perceived moral obligation and sustainability self-identity on sustainability development: A theory of planned behavior purchase intention model of sustainability-labeled coffee and the moderating effect of climate change skepticism.

 *Business Strategy and the Environment, 29(6), 2404-2417.
- Cheung, M. F., & To, W. M. (2019). An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing and Consumer Services*, 50, 145-153. https://doi.org/10.1016/j.jretconser.2019.04.006.
- De Leeuw, A., Valois, P., Ajzen, I., & Schmidt, P. (2015). Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions. *Journal of environmental psychology*, 42, 128-138. https://doi.org/10.1016/j.jenvp.2015.03.005.
- Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the association for information science and technology*, 67(9), 2047-2059.
- Hassim, A. (2021). Why younger generations are more willing to change in the name of sustainability. GreenBiz. https://www.greenbiz.com/article/why-younger-generations-are-more-willing-change-name-sustainability.

- Hinojosa, A. S., Gardner, W. L., Walker, H. J., Cogliser, C., & Gullifor, D. (2017). A review of cognitive dissonance theory in management research: Opportunities for further development. *Journal of Management*, 43(1), 170-199.
- Jochems, J., & Schol, T. C. (2020). Addressing the gap between millennials' attitude and behavior towards sustainable packaging in the Dutch FMCG industry. urn:nbn:se:hkr:diva-20806.
- Kainuwa, A., Binti, N., & Yusuf, M. (2013). Influence of socio-economic and educational background of parents on their children's education in Nigeria. *International journal of scientific and research publications*, 3(10), 2250-3153.
- Kalsoom, Q. (2018). Attitude Change to Sustainable Development. SpringerLink. https://link.springer.com/referenceworkentry/10.1007/978-3-319-63951-2_160-1?noAccess=true&error=cookies_not_supported&code=1991f676-d9e2-4d87-8136-96b11fe2d96a.
- Kardos, M., Gabor, M. R., & Cristache, N. (2019). Green marketing's roles in sustainability and ecopreneurship. Case study: Green packaging's impact on Romanian young consumers' environmental responsibility. *Sustainability*, 11(3), 873.
- Kasasa. (2021). *Boomers, Gen X, Gen Y, Gen Z, and Gen A explained*. Kasasa. https://www.kasasa.com/exchange/articles/generations/gen-x-gen-y-gen-z#:%7E:text=Gen%20Z%3A%20Gen%20Z%20is,68%20million%20in%20the%20U.S.
- Katt, F., & Meixner, O. (2020). A systematic review of drivers influencing consumer willingness to pay for organic food. *Trends in Food Science & Technology*, 100, 374-388. https://doi.org/10.1016/j.tifs.2020.04.029.
- Kim, A., McInerney, P., Smith, T. R., & Yamakawa, N. (2020). What Makes Asia–Pacific's Generation Z different. *McKinsey and Company*, 29.

- Lamorte, W. (2019). The Theory of Planned Behavior. Behavioral Change Models. https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/BehavioralChangeTheories3.html#:%7E:text=Subjective%20norms%20%2D%20This%20refers%20to,should%20engage%20in%20the%20behavior.
- Ling, C. Y. (2013). Consumers' purchase intention of green products: An investigation of the drivers and moderating variable. *Elixir Marketing Management*, 1, 14503-14509
- Martinho, G., Pires, A., Portela, G., & Fonseca, M. (2015). Factors affecting consumers' choices concerning sustainable packaging during product purchase and recycling. *Resources, Conservation and Recycling*, 103, 58-68. https://doi.org/10.1016/j.resconrec.2015.07.012.
- Mbachu, C., Okoli, C., Onwujekwe, O., & Enabulele, F. (2018). Willingness to pay for antiretroviral drugs among HIV and AIDS clients in southeast Nigeria. *Health Expectations*, 21(1), 270-278. https://doi.org/10.1111/hex.12612.
- Mirikitani, L. T. (1972). Kapampangan syntax. *Oceanic Linguistics Special Publications*, (10), i-263. http://www.jstor.org/stable/20019139.
- Nikolić, T. M., Paunović, I., Milovanović, M., Lozović, N., & Đurović, M. (2022). Examining Generation Z's Attitudes, Behavior, and Awareness Regarding Eco-Products: A Bayesian Approach to Confirmatory Factor Analysis. *Sustainability*, 14(5), 2727. https://doi.org/10.3390/su14052727.
- Olson, E. L. (2013). It's not easy being green: the effects of attribute tradeoffs on green product preference and choice. *Journal of the Academy of Marketing Science*, 41(2), 171-184. https://doi.org/10.1007/s11747-012-0305-6.

- Orzan, G., Cruceru, A., Bălăceanu, C., & Chivu, R. G. (2018). Consumers' Behavior Concerning Sustainable Packaging: An Exploratory Study on Romanian Consumers. *Sustainability*, 10(6), 1787. https://doi.org/10.3390/su10061787.
- The Philippines. SEA Circular. (2020). https://www.sea-circular.org/country/philippines/#:~:text=The%20Philippines%20is%20one%20of.
- Prakash, G., & Pathak, P. (2017). Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. *Journal of cleaner production*, 141, 385-393. https://doi.org/10.1016/j.jclepro.2016.09.116.
- Ramya, N. A. S. A. M., & Ali, S. M. (2016). Factors affecting consumer buying behavior.

 International journal of applied research, 2(10), 76-80.
- Rezai, G., Teng, P. K., Mohamed, Z., & Shamsudin, M. N. (2013). Going green: Survey of perceptions and intentions among Malaysian consumers. *International Business and Management*, 6(1), 104-112. 10.3968/j.ibm.1923842820130601.1125.
- Rizwan, M., Mahmood, U., Siddiqui, H., & Tahir, A. (2014). An empirical study of green purchase intentions. *Journal of Sociological Research*, 5(1), 290-305. http://dx.doi.org/10.5296/jsr.v5i1.6567.
- Schanes, K., Dobernig, K., & Gözet, B. (2018). Food waste matters-A systematic review of household food waste practices and their policy implications. *Journal of cleaner production*, 182, 978-991. https://doi.org/10.1016/j.jclepro.2018.02.030.
- Shen, J. (2012). Understanding the Determinants of Consumers' Willingness to Pay for Eco-Labeled Products: An Empirical Analysis of the China Environmental Label. *Journal of Service Science and Management*, 5, 87-94. DOI:10.4236/jssm.2012.51011.

- Taufique, K. M. R., Vocino, A., & Polonsky, M. J. (2017). The influence of eco-label knowledge and trust on pro-environmental consumer behavior in an emerging market. *Journal of Strategic Marketing*, 25(7), 511-529. https://doi.org/10.1080/0965254X.2016.1240219.
- Wee, C. S., Ariff, M. S. B. M., Zakuan, N., Tajudin, M. N. M., Ismail, K., & Ishak, N. (2014). Consumers' perception, purchase intention, and actual purchase behavior of organic food products. *Review of Integrative Business and Economics Research*, 3(2), 378.
- Wu, F., Misra, M., & Mohanty, A. K. (2021). Challenges and new opportunities on barrier performance of biodegradable polymers for sustainable packaging. Progress in Polymer Science, 117, 101395. https://doi.org/10.1016/j.progpolymsci.2021.101395.
- Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological economics*, 134, 114-122. https://doi.org/10.1016/j.ecolecon.2016.12.019.